

SPIRIT

Missouri School-based Substance Abuse Prevention
Intervention and Resource Initiative

Seventh Year Report

2008-2009

Missouri Department of Mental Health Division of Alcohol and Drug Abuse

This report was prepared for the State of Missouri by:
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Executive Summary

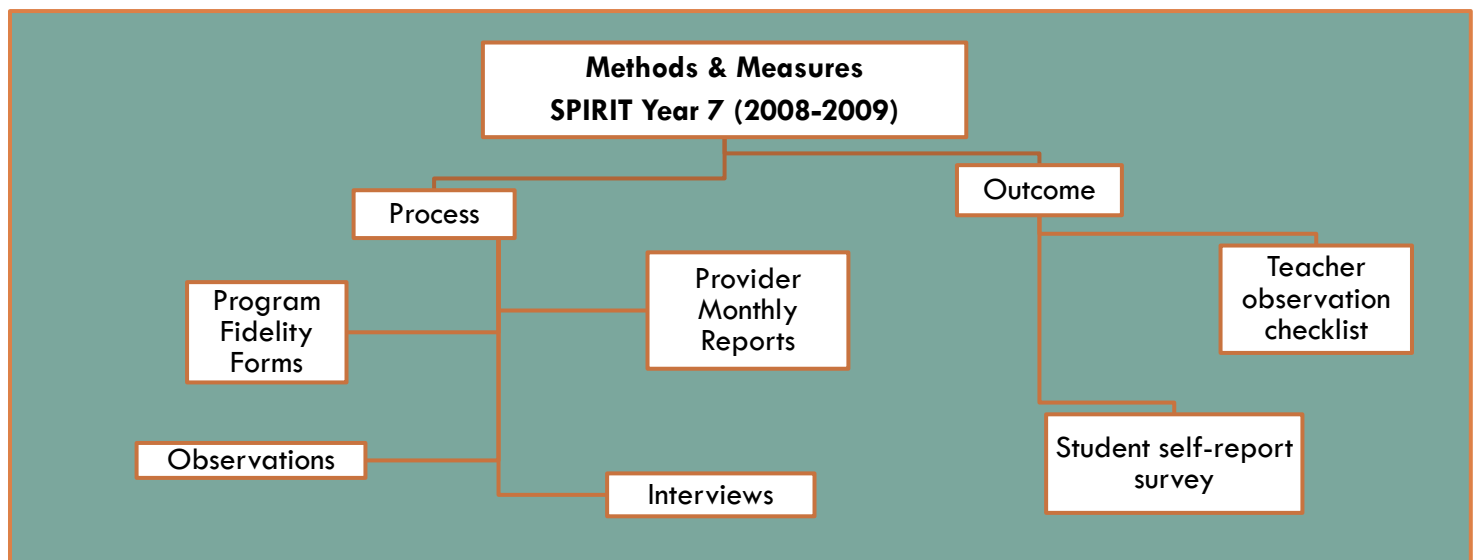
Introduction – An Overview of the SPIRIT Project

FY2009 marks the seventh year of the School-based Prevention Intervention and Resources Initiative (SPIRIT), a program sponsored by the Missouri Department of Mental Health, Division of Alcohol and Drug Abuse. The purpose of the initiative is to delay the onset and decrease the use of substances, improve overall school performance, and reduce incidents of violence.

The SPIRIT program pairs a prevention agency with a school district serving a high-risk population (i.e., at least 60% of students receiving free/reduced lunch, test scores below state average, substance use rates above state average). The five school districts participating in the SPIRIT initiative are Carthage R-IX, Hickman Mills C-1, Knox Co. R-1, New Madrid Co. R-1, and Ritenour. Prevention specialists from a provider agency assist in the facilitation of evidence-based prevention programming, help to identify and respond to the additional needs of some students for selective or indicated services, and provide resources and technical assistance as needed.

The evidence-based prevention programs implemented during the 2008-2009 school year, depended on district and grade level and included PeaceBuilders (PB), Life Skills Training (LST), Reconnecting Youth (RY), Second Step (SS), Project Towards No Drug Abuse (TND), and Too Good for Drugs (TGFD). This report presents the results of the evaluation of the seventh year of the SPIRIT project.

Methods & Measures. The SPIRIT evaluation, conducted by the Child and Family Mental Health Services Research Division of the Missouri Institute of Mental Health (MIMH), uses a variety of methods and measures to gather information pertaining to the main goals of the SPIRIT project. The majority of data are collected by students' completion of a self-report questionnaire. Additional information is supplied through teachers' report based on observations of students, interviews with providers and school administrators, observations of program implementation, monthly reports submitted by providers, and fidelity forms submitted by program implementers.



All students attending schools in which SPIRIT is implemented receive prevention programming (n = 7,929). Prior to participating in the evaluation, however, students are required to have parental consent. Parental consent was obtained for 70.4% of all participating students. Each consented student was assigned a unique identification code in order to track responses while maintaining confidentiality.

Data were collected at the beginning of the fall semester for each student who was new to the evaluation and each consented student in the kindergarten, fourth, sixth, and ninth grades. At the end of the spring semester, random sampling was used where possible to select consented students to participate in the evaluation. This method was used to ease the burden on schools and to increase the reliability of results. Where the number of consented students was large enough, one hundred students per grade grouping (K-3, 4-5, 6-8, 9), equally represented by sex and grade, were randomly selected from each participating school district to be evaluated.

Summary of Outcome Findings

Substance Use

- *Cigarette use.* Around 23% of SPIRIT 6th – 9th grade students had ever smoked a cigarette in their lifetime. These rates were the same as youth in Missouri and national samples. Around 8% of 6th – 9th grade students had smoked in the past 30 days, a rate similar to Missouri and the nation. The age of initiation was slightly higher among SPIRIT youth than in the Missouri comparison.
- *Alcohol Use.* About 48% of 6th – 9th grade students in SPIRIT had consumed alcohol in their lifetime, compared to 54% of Missouri youth and 38% of youth nationally. Thirty-day alcohol use was similar among SPIRIT students (16%) and those in the U.S. (15%), and lower than Missouri youth (22%). Students in the SPIRIT sample began drinking alcohol at a younger age than those in the Missouri sample.

Table 1. SPIRIT, Missouri and National Drug Use Comparison				
		SPIRIT ¹	Missouri ²	National ³
Cigarettes	Lifetime use	23.3%	23.3%	22.9%
	Past month (30-day)	8.4%	10.1%	9.1%
	Age of initiation	11.08	11.31	n/a
Alcohol	Lifetime use	48.0%	53.6%	38.3%
	Past month (30-day)	16.1%	22.3%	14.6%
	Age of initiation	11.04	11.81	n/a
Marijuana	Lifetime use	16.1%	13.9%	16.5%
	Past month (30-day)	8.6%	6.1%	6.7%
	Age of initiation	12.60	12.60	n/a
Inhalants	Lifetime use	7.5%	10.4%	9.3%
	Past month (30-day)	3.6%	4.6%	1.1%
	Age of initiation	11.60	n/a	n/a

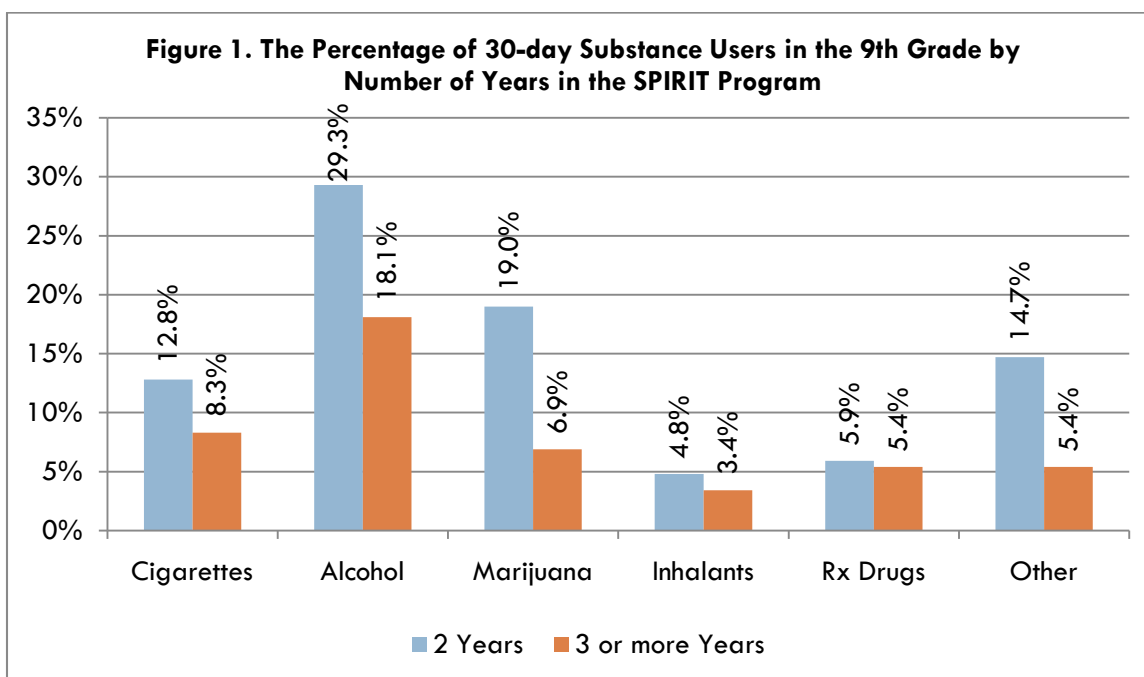
¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

² Missouri Student Survey (MSS) 2008, 6th – 9th grade, n = 86,861 (average age = 13.64)

³ National Statistics on Drug Use and Health (NSDUH) 2008, n = 24,892 (12 – 17 years of age)

- **Marijuana Use.** 16% of 6th – 9th grade SPIRIT students reported using marijuana at some time in their lives, the same percentage as those in the U.S. sample but higher than the sample of Missouri youth. Around 9% of SPIRIT 6th-9th graders had used marijuana in the past 30 days; higher than both Missouri and the nation. The age of first use was similar to Missouri rates.
- **Other drug use.** The percentage of users of other drugs did not vary much between SPIRIT, Missouri, and the nation.

To determine the effect of *long-term* participation in SPIRIT, a comparison was made of 30-day use patterns between 9th grade students in the districts with two years of programming in the 6th-9th grades and use in the districts in which programming had been implemented for three or more years. The difference in the use of alcohol, cigarettes, marijuana and other drugs between the two groups was significant.



Attitudes toward Substance Use

- **Substance Use Norms.** Approximately 40% of students thought that *most* teenagers and adults use marijuana. Students were more likely to think that adults used than teenagers used. For the most part, younger students were more likely to believe that most teens and adults used substances than older youth.
- **Substance Use Intentions.** Students were more likely to indicate they might use alcohol in the future than cigarettes or marijuana, with around 1/3 of students agreeing they might use alcohol, compared to 7% who thought they might use cigarettes or marijuana.
- **Risk of Harm from Substance Use.** Over 85% of students thought that the use of ecstasy, methamphetamine, inhalants, and prescription drugs without a prescription was harmful. Around three quarters thought marijuana was harmful and approximately 60% of students thought that the use of cigarettes and alcohol posed a moderate to great risk of harm.

- *Disapproving Attitudes toward Substance Use.* Although most thought that the use of any substance was wrong, students were less likely to think that using alcohol was wrong compared to the use of the other substances. Over 73% of students thought using marijuana, ecstasy, methamphetamine, inhalants, or the unintended use of prescription medications was very wrong.

Problem Behavior

- *Problem behaviors (Kdg.-3rd grades).* Very few young students were described as being reactively or proactively aggressive. Teachers were more likely to characterize a child as reactively rather than proactively aggressive.
- *Problem behaviors (4th – 9th grades).* In the past three months, over 50% of 4th – 9th grade students reported making fun of others, being made fun of, or having rumors or lies spread about them. The behaviors least likely to be reported were spreading rumors about others, being in a physical fight, and being afraid of being beaten up.

School Performance

- *Grades.* The majority of students (71.8%) reported average grades last school year of either A's or B's, with females reporting higher grades than males.
- *Attitudes toward school.* Generally students held positive attitudes about school.

Program Effectiveness

- In general, the higher the grade level, the smaller the percentage of students who rated the program positively in all categories. Despite this, ¾'s of students in 9th grade reported liking the program.
- A greater percentage of females liked the program than males, thought the program positively affected their behavior, and thought it improved their self-esteem. Females were also more likely to think that the time spent on the program was helpful.
- The majority of youth liked the program at least a little (83.5%) and most thought the program was effective, especially in helping them with resistance skills and anger management. The area in which the program was thought to be least effective was in getting others to be nicer.

Protective Factors

- *Empathy.* The majority of students, from about 79% to 88%, reported they were sad when someone was left out, were upset when they saw an animal hurt, and felt bad when someone else got their feelings hurt. Being upset at seeing an animal hurt was most frequently reported.
- *Decision making.* Students were more likely to report making good decisions than thinking about their choices, the consequences of their actions, and other people's feelings. Younger students were more likely than older youth to report thinking about their choices and others' feelings before making decisions.

- *Caring adults.* The vast majority of students reported there were caring adults at both their school and home. In general, more students in rural district than urban areas thought there were caring adults at school.

Site Visits

- The majority of schools across the districts reported fewer disciplinary incidents and attributed this to the influence of the SPIRIT programs.
- Principals reported that the small group work conducted in most SPIRIT schools by prevention specialists with high risk students was particularly effective.
- Teachers reportedly reinforced program messages, helping to make the programs more effective. Both administrators and teachers found that using program language enhanced communication when it was necessary to talk with students about disciplinary incidents.
- One of the sites began implementing PeaceBuilders this past year in two previously uninvolved elementary schools bringing all schools in the district into the SPIRIT program. Teachers and principals in the schools reported that the program had already begun to make a big difference in school climate and student behavior.

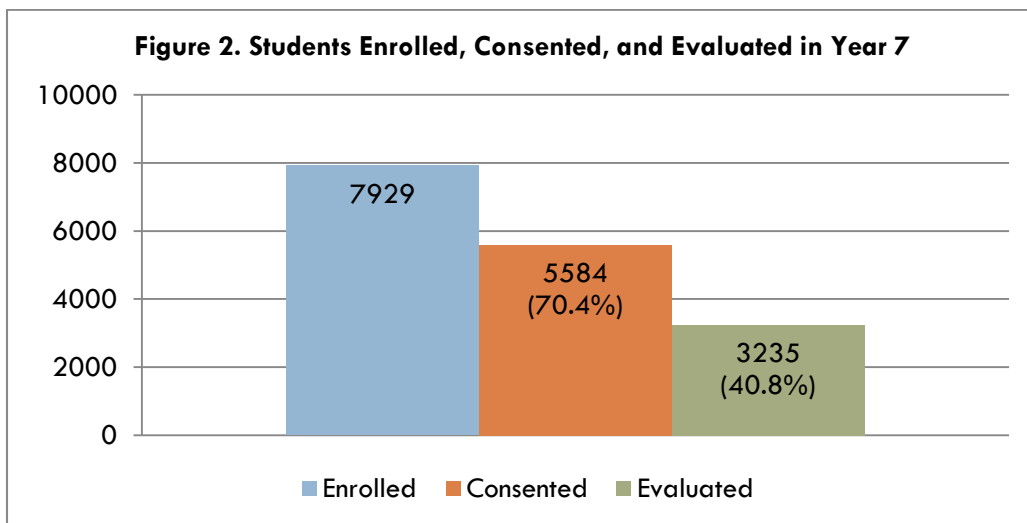
Recommendations

- *Use of Alcohol, Tobacco and Marijuana.* Use of all of these substances increased significantly between grades 4-5 and grades 6-8 suggesting that substance use lessons need to be strengthened in grades 4-5.
- *Inhalants.* Although 30-day inhalant use by the SPIRIT sample is slightly lower than the Missouri sample, use in both SPIRIT and Missouri samples is about 4 times higher than that reported nationally. Because of the deadly nature of inhalants, previous recommendations to educate students about the effects of using these substances are continued.
- *Attitudes toward Use.* In general, students reported that use of substances was less harmful than wrong suggesting that more education on the effects of substances is needed.
- *Alcohol Use.* The 30-day use of alcohol was almost double the use of other substances in most districts. Although the percentage of users was lower in the SPIRIT sample than in the Missouri sample and about the same as reported national use, more education on the effects of alcohol is recommended, particularly because almost a third of the students reported that they intended to use alcohol in the future and almost three-quarters of the students thought that most adults drink alcohol.
 - When asked if they had five or more drinks on one occasion (binge drinking) in the past 30 days, only 9.0% of students reported doing so. However, when asked the question in a slightly different way (i.e., on days that you drink, how many drinks do you have) 26.4% reported binge drinking, although not necessarily within the past month. More education on binge drinking and the ramifications of high consumption is needed.

- *Marijuana.* Because about 9% of SPIRIT 6th-9th graders had used marijuana in the past 30 days (higher than both Missouri and the nation), more emphasis on the effects of marijuana is recommended.
- *Prescription Drugs.* Around 8% of SPIRIT students said they had used prescription drugs without a doctor's prescription. Although the percentage has remained about the same over the past 2 years, concern about use and about "pharming" parties was expressed by two high school principals, and national surveys show that use is a growing problem. Because prescription drug use is not covered by any of the currently used curricula, it is recommended that providers include information on the addictive qualities of many prescription drugs and the dangers of drug interactions when mixing drugs.
- *Substance Use Norms.* All grade levels had distorted ideas about the use of substances by teenagers and adults. More normative education is recommended.
- *Problem behaviors (4th – 9th grades).* In the past three months, over 50% of 4th – 9th grade youth reported making fun of others, being made fun of, or having rumors or lies spread about them. Additionally, bullying was mentioned by most principals as a problem behavior. To address these problems, continued emphasis on bullying is recommended, including education about the role of bystanders.

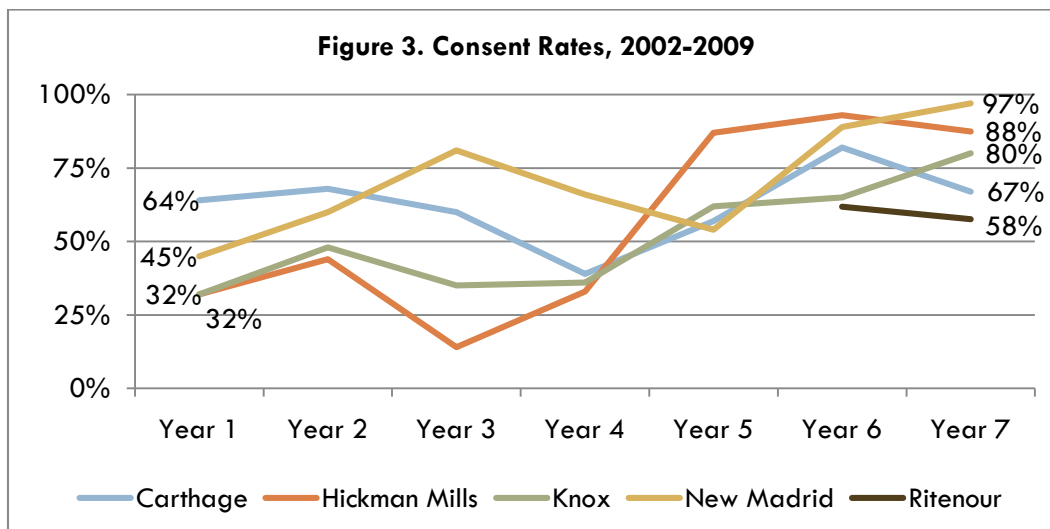
Chapter 1 - Demographics

In the seventh year of the SPIRIT project, 7,929 children and youth participated in SPIRIT from five participating school districts. This is an addition of 589 students from the previous year of the project. The percentage of students who received parental consent to participate in the evaluation, decreased from over 76% in year 6 to approximately 70% (5,584 students) in year 7.



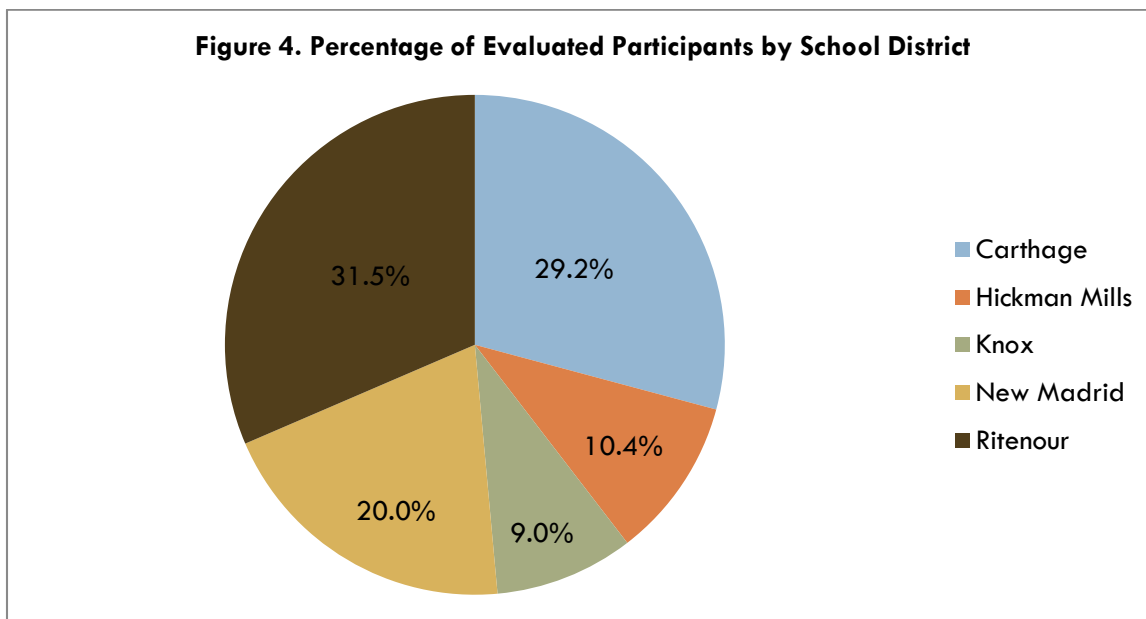
Although the overall percentage declined, three districts reached a consent rate of 80% or above, and four of the five districts increased their consent rates relatively steadily from the first to the seventh year of the SPIRIT project.

Some of the fluctuation in consent rates may be due to the high rates of transiency in high risk school districts. In addition, all schools within a district may not receive SPIRIT programming causing an influx of new students to the program as students transition from elementary to middle school or from middle school to high school.

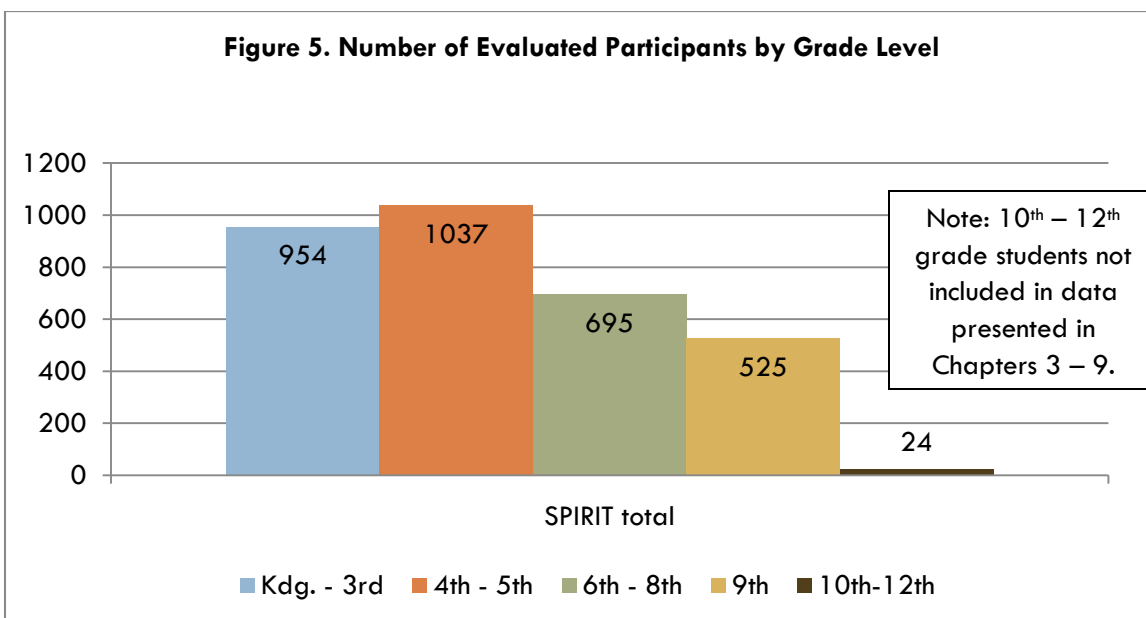


In order to ease the burden on schools and to increase the reliability of results, a random sample of children and youth were selected to participate in the evaluation. In the spring of 2009, 40.8% of those who received parental consent were evaluated at post-test.

Over 60% of the sample was students from the Carthage and Ritenour School Districts. The uneven representation of the school districts is due to the size of the school districts and the number of participating schools within each district.



Although the report includes students in kindergarten through ninth grades, the majority of those evaluated were in elementary school (Kdg. – 5th grade). Since there were so few students (n=24) in grades 10-12, these participants are not included in the following analyses.



Every district except Hickman Mills had a relatively equal distribution of males and females. When interpreting district comparison data, consideration should be given to the fact that females were less likely to use substances and display problem behavior and potentially risky attitudes.

Table 2. Percentage of Evaluated Participants by Sex						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Male	49.2%	49.9%	44.0%	49.3%	50.9%	48.4%
Female	50.8%	50.1%	56.0%	50.7%	49.1%	51.6%

While there are very few participants of other ethnic/racial categories, there are differences in White, African American, and Latino representation among school districts.

Students in the Carthage district were mostly White and Latino, and the majority of Latino students were found in this district. Hickman Mills School District was mostly comprised of African American students. Knox School District was overwhelmingly White, with very few children and youth of any other race/ethnicity. The New Madrid school district has mostly White and African American students as is true in Ritenour. Both districts, however, also have a small percentage of Latino students. Since the participating school districts represent every region of Missouri and are located in either rural or urban settings, the differences between them in racial and ethnic composition are to be expected, but should be considered when interpreting district comparison data.

Comparisons with the SPIRIT total sample and the Missouri and national racial and ethnic compositions show that African Americans are over represented and Whites are underrepresented in the SPIRIT sample. The percentage of Latinos in SPIRIT is similar to the percentage in the United States, but greater than in the state of Missouri.

These differences in the distribution of youth of various races and ethnicities between SPIRIT, Missouri, and the United States are due in large part to the high-risk nature of the districts participating in SPIRIT and should be considered when interpreting comparisons between the data presented in the following chapters.

Table 3. Percentage of Evaluated Participants by Race/Ethnicity (4 th – 9 th grade only) ¹								
	United States [†]	Missouri [†]	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
White/Caucasian*	74.1%	84.0%	50.6%	64.0%	9.5%	89.4%	64.7%	42.7%
Black/African-American*	12.4%	11.3%	29.1%	3.3%	72.9%	2.2%	31.8%	34.2%
Native American/Alaskan Native*	0.8%	0.4%	1.9%	2.9%	2.3%	0.6%	0.6%	1.8%
Asian*	4.3%	1.4%	1.0%	0.2%	0.0%	0.6%	0.9%	1.7%
Native Hawaiian or Other Pacific Islander*	0.1%	0.1%	0.4%	0.4%	0.4%	1.1%	0.3%	0.5%
Other (not otherwise specified)*	6.2%	1.8%	3.2%	2.3%	3.4%	3.4%	0.3%	4.5%
Hispanic/Latino (of any race)	14.7%	2.9%	13.9%	26.8%	11.5%	2.8%	1.5%	14.6%

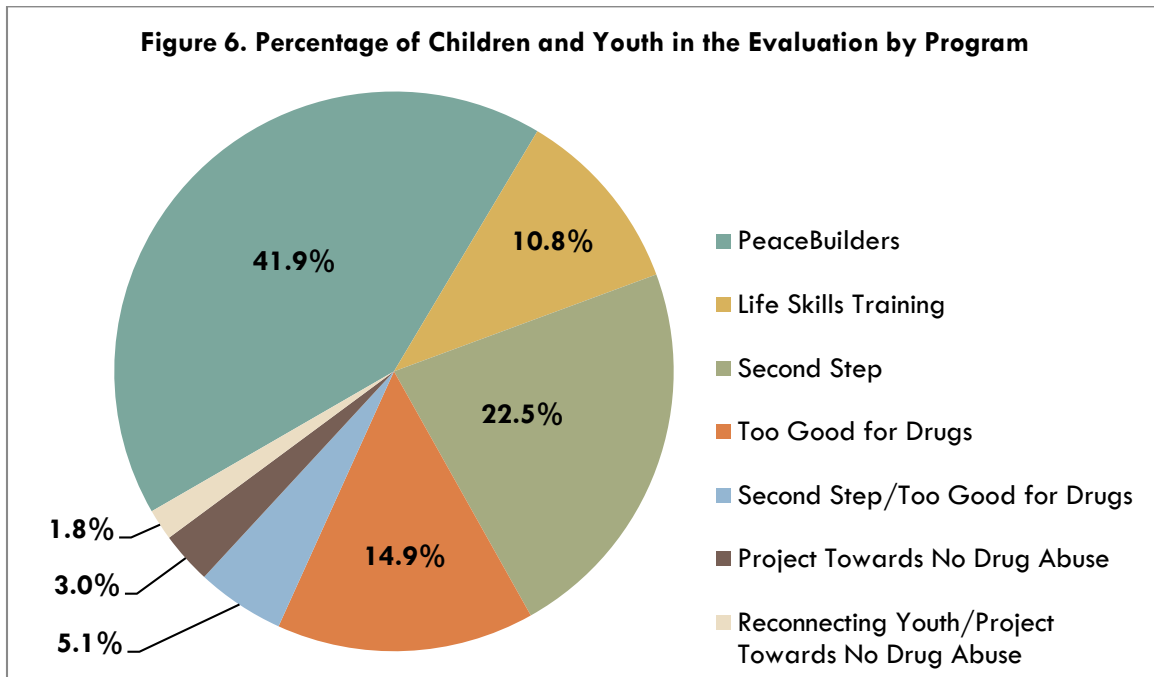
* Non-Hispanic/Latino

¹ Due to the discontinuation of collecting demographic data through school district administration, data on race and ethnicity is now collected via self-report only. The question of race and ethnicity is only posed to evaluated youth in the 4th – 9th grades.

[†] U.S. Census Bureau, American Community Survey, 2005-2007 3-year estimates.

Chapter 2 - The SPIRIT Programs

In the seventh year of the SPIRIT project, prevention programming was implemented at all school levels in five school districts across the state of Missouri. Site visits, including interviews with prevention providers and school administrators and observations of program implementation, were conducted during the 2008-2009 school year. Prevention providers were also required to submit monthly reports to evaluators and the Division of Alcohol and Drug Abuse. Teachers completed program implementation fidelity forms for analysis. The following are brief descriptions of the information gathered from these sources regarding the implementation of evidence-based prevention programs within each of the five participating school districts.



Carthage School District

Within the Carthage School District, PeaceBuilders was implemented by prevention specialists in three of five elementary schools (Kdg. – 6th grade) and Life Skills Training was taught by health and PE teachers in the junior high school (7th – 8th grade) and in 9th grade in the high school. Reconnecting Youth was taught by a prevention specialist to select students from the high and alternative schools (9th – 12th grade).

Hickman Mills School District

In the Hickman Mills School District, SPIRIT was implemented in one of eight elementary schools (Kdg. – 5th grade), one of two middle schools (6th – 8th grade), and to ninth grade students at the high school. Prevention specialists from the provider agency implemented Second Step and Too

Good For Drugs at the elementary school and Second Step at the middle school. At the high school, a prevention specialist taught Reconnecting Youth in the fall semester and Project Towards No Drug Abuse in the spring semester. It should be noted that students in the elementary school only received programming for four months.

Knox School District

In the Knox School District, SPIRIT was implemented by classroom teachers in the elementary school (Kdg. – 5th grade), and by prevention specialists in the middle schools (6th – 8th grade) and at the high school (9th). PeaceBuilders was taught at the elementary school, Second Step at the middle school and Project Towards No Drug Abuse to ninth grade youth at the high school. Reconnecting Youth was taught by a prevention specialist to indicated students in the ninth through twelfth grades.

New Madrid School District

In the New Madrid School District, SPIRIT was implemented in all three elementary schools (Kdg. – 5th grade) for the first time this year. The program was also implemented in the middle school (6th – 8th grade) and to ninth grade students at the high school. A prevention specialist taught Peace Builders at one elementary school, while classroom teachers implemented PeaceBuilders at the other two elementary schools. A prevention specialist also taught Second Step at the middle school and Project Towards No Drug Abuse to the ninth grade youth at the high school.

Ritenour School District

In the Ritenour School District, SPIRIT was implemented by prevention specialists in all six elementary schools (4th – 5th grade), both middle schools (6th – 8th grade), and to ninth grade students at the high school. Second Step was taught at the elementary schools and Too Good For Drugs at the middle schools and the high school.

Fidelity, Observations and Interviews

Program implementation forms completed by the prevention specialists documented “fidelity,” or the degree to which a particular program adhered to its evidence-based model. Adherence to the model is important because it predicts what the impact on students might be based on the original studies. Except for modifications to make them more age or cultural appropriate, other programmatic changes should be approved by the developer to retain the evidence base.

Programs at all of the districts were implemented with fidelity with the exception of two elementary schools. In both cases, programming was only implemented for part of the school year. Most modifications in SPIRIT were designed to make the programs age and culturally appropriate.

In the schools, site visits included observations of program implementation and interviews with all school principals except one. Prevention specialists from the provider agencies were also interviewed. Without exception, principals expressed appreciation for being included in the SPIRIT program, commented on the ability of the prevention specialists to effectively work with the students in both program implementation and small group work, and cited examples of the ways

in which the program positively impacted their students and their schools. Following are some of those comments:

"We've had a 50% decrease in office referrals because teachers are so good in their classrooms with the PeaceBuilders."

"We've been fortunate because SPIRIT has been here so long. The teachers report the same thing. It has a positive effect on the school climate as a whole."

"Some middle schoolers came by at lunch the other day and said they remembered everything and asked if I would come up there and do [the PeaceBuilder pledge]. I've even had older students give and receive praise notes."

"[PeaceBuilders] makes a world of difference in working with students. They have improved attitudes and there is less bullying."

"The teachers like SPIRIT because of the way the kids responded."

"At first [the teachers] were a bit skeptical [about participation in SPIRIT] just because they were losing time out of their class. But as time has gone on they've seen the quality."

"We're really making in-roads to students thinking more about their actions, bringing important maturity to our fifth graders."

"We saw a decrease in disciplinary actions last year. It's helping. There's no question. . . With the small group kids you can see the change. It's worth it. There are always specific kids who come out of group a different person."

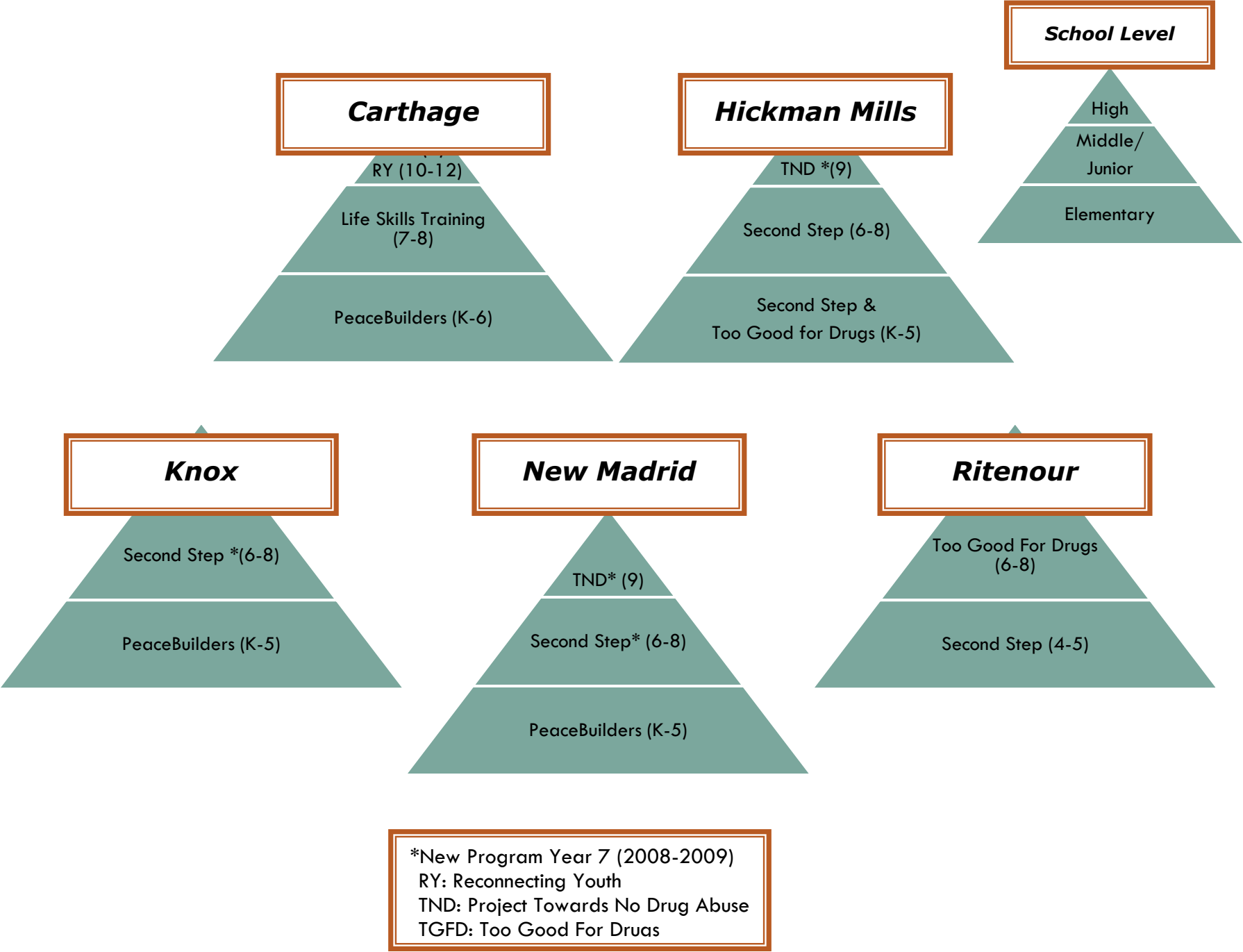
"[The change to PeaceBuilders] has been wonderful. Kids love it. Teachers love it. The teachers have just gone full steam ahead. In any of the elementary schools you can see it everywhere. I think it's going really well. We're so glad we're involved with it!"

"We really want [SPIRIT] to continue because I think it really is making a difference."

All of the principals, regardless of district, spoke of the need for increased parental involvement, but also cited the difficulty of getting many of the parents to attend any school activity, even parent-teacher conferences. Additionally, poverty and transiency were two problems identified that severely impact the schools. Most principals stated that the parents of many of their students teach them to respond to any provocation by fighting, and many fail to teach good manners and other social skills. Principals cited lack of parental supervision and parental drug use or incarceration as problems that many students have to deal with. These factors make prevention programming and SPIRIT more important in providing protective factors that can buffer against substance use and violence.

The figure below displays the prevention program being implemented in each district and grade level.

Figure 7. Program Implementation by Site, Year 7 (2008-2009)



Chapter 3 - Substance Use

In the following chapter, indicators of substance use are presented, including “ever having used or tried substances” (lifetime use), using substances within the month previous to taking the survey (30-day use), and the age at which substances use was initiated (age of 1st use). An examination of the extent and circumstances of use is also given. Unless indicated otherwise, the following data apply to students in 4th – 9th grades. Wherever possible, substance use by students in SPIRIT is compared to the most current estimates of use from state and national surveys. Specifically, the 2008 Missouri Student Survey and the 2008 National Survey on Drug Use and Health are used to compare SPIRIT data.

Lifetime Substance Use

Lifetime Substance Use Comparisons with State and National Samples. The percentage of students in the 6th – 9th grades who had ever smoked a cigarette in their lifetime was the same as in Missouri and the United States. Slightly fewer youth in SPIRIT had used alcohol in their lifetime than those in the Missouri sample; a greater percentage of SPIRIT youth had used alcohol than those in the United States. Lifetime marijuana use was similar among SPIRIT students and the U.S., and higher than Missouri youth. The percentage of users of other drugs did not vary much among SPIRIT, Missouri, and the nation.

Table 4. Comparison Between Estimates of SPIRIT, Missouri, and US Lifetime Substance Use (6 th – 9 th grade)			
	SPIRIT Total ¹	MO ²	US ³
Cigarettes	23.3	23.3	22.9
Alcohol (more than a sip)	48.0	53.6	38.3
Alcohol (once or twice a month)	15.5	---	---
Marijuana	16.1	13.9	16.5
Ecstasy	2.3	---	---
Methamphetamine	2.0	---	---
Inhalants	7.5	10.4	9.3
Prescription Drugs without Rx	7.7	---	---

¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

² Missouri Student Survey (MSS) 2008, 6th – 9th grade, n = 86,861 (average age = 13.64)

³ National Statistics on Drug Use and Health (NSDUH) 2008, n = 24,892 (12 – 17 years of age)

Lifetime Substance Use by SPIRIT Site. There were many differences among districts in the percentage of students who had used substances. These differences could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 5. Lifetime Substance Use Across SPIRIT Sites (6 th – 9 th grade)						
	SPIRIT Total ¹	Carthage ²	Hickman Mills ³	Knox ⁴	New Madrid ⁵	Ritenour ⁶
Cigarettes	23.3	14.5	14.2	9.3	30.3	31.7
Alcohol (more than a sip)	48.0	26.5	53.2	29.9	47.8	64.1
Alcohol (once or twice a month)	15.5	12.4	8.5	3.7	14.4	23.0
Marijuana	16.1	7.3	11.3	3.7	10.9	28.3
Ecstasy	2.3	1.5	1.4	0.0	2.5	3.6
Methamphetamine	2.0	1.8	2.1	0.0	2.0	2.7
Inhalants	7.5	6.2	3.5	2.8	8.0	10.5
Prescription Drugs without Rx	7.7	6.2	2.8	2.8	6.0	12.1

¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

²Carthage, spring 2009, 6th – 9th grade, n = 275 (average age = 13.32)

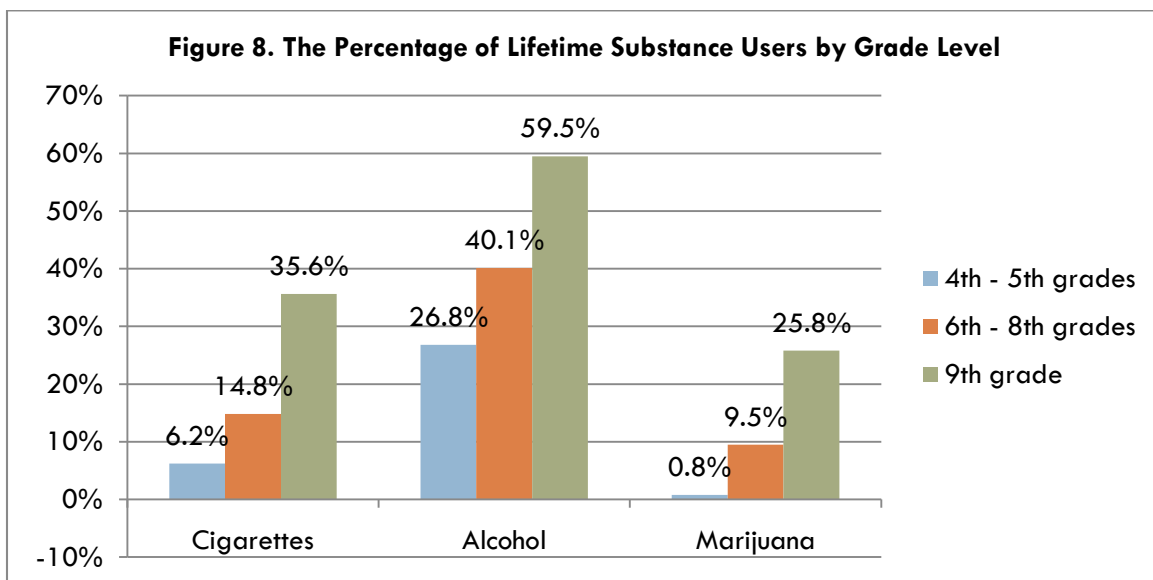
³Hickman Mills, spring 2009, 6th – 9th grade, n = 137 (average age = 13.29)

⁴Knox, spring 2009, 6th – 9th grade, n = 107 (average age = 13.23)

⁵New Madrid, spring 2009, 6th – 9th grade, n = 201 (average age = 13.73)

⁶Ritenour, spring 2009, 6th – 9th grade, n = 496 (average age = 14.10)

Lifetime Substance Use by Grade Level. The higher the grade level, the more likely youth were to have begun using cigarettes, alcohol, marijuana, and prescription drugs without a prescription.



Lifetime Substance Use by Site (4th-5th grade). Marijuana use rates were negligible across all SPIRIT sites.

Table 6. Lifetime Substance Use Across SPIRIT Sites (4 th – 5 th grade)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Cigarettes	6.2	5.3	3.1	6.9	4.3	7.5
Alcohol (more than a sip)	26.8	15.0	23.7	20.8	23.0	33.8
Marijuana	0.8	0.0	2.1	0.0	0.0	1.1

Lifetime Substance Use by Sex. Males and females were almost equally likely to have used substances in their lifetime.

Past Month (30-day Use)

30-day Substance Use Comparisons with State and National Samples. The use of cigarettes, marijuana, and inhalants in the past month among SPIRIT students did not vary to a great extent from youth of Missouri. A smaller percentage of students participating in SPIRIT used alcohol in the past 30 days compared to Missouri youth. SPIRIT 30-day use rates did not vary from United States use rates.

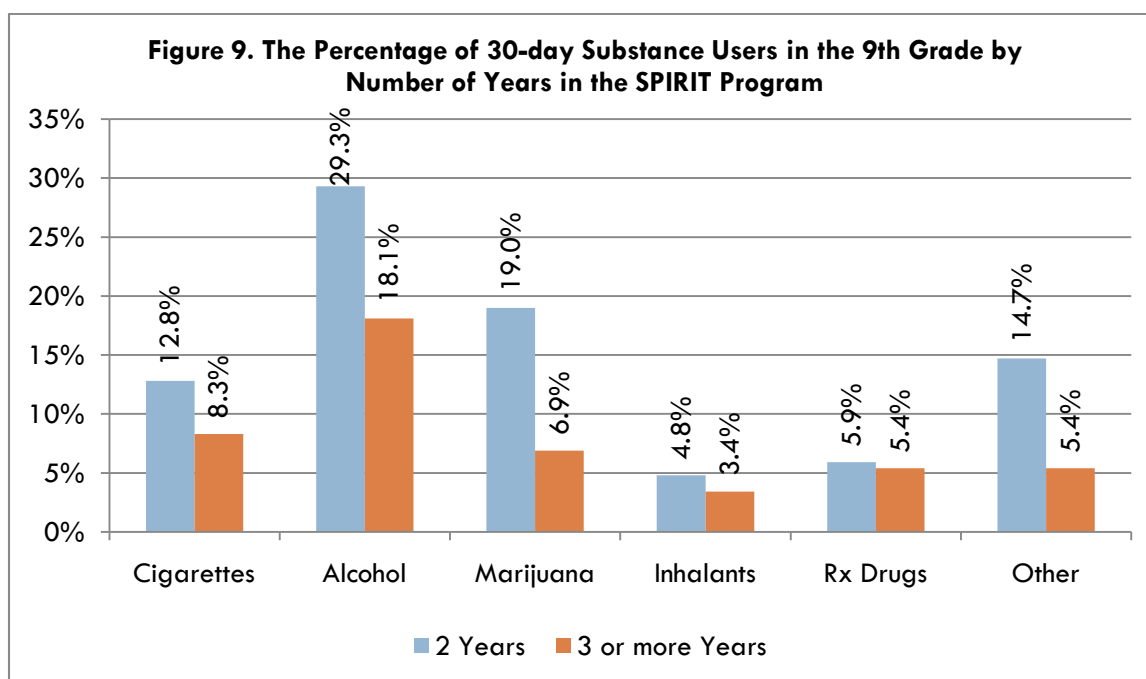
	SPIRIT Total ¹	MO ²	US ³
Cigarettes	8.4	10.1	9.1
Alcohol	16.1	22.3	14.6
Marijuana	8.6	6.1	6.7
Inhalants	3.6	4.6	1.1
Prescription Drugs without Rx	4.4	---	---
Other Illegal Drugs	6.9	---	---

¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

² Missouri Student Survey (MSS) 2008, 6th – 9th grade, n = 86,861 (average age = 13.64)

³ National Statistics on Drug Use and Health (NSDUH) 2008, n = 24,892 (12 – 17 years of age)

30-day Substance Use of 9th Grade by Years in Program. To fully learn the effect of *long-term* participation in SPIRIT, a comparison of 30-day use patterns was made between 9th grade students in the districts where programming in the 6-9th grades began two years ago and use in the districts in which programming had been implemented for three or more years. The difference in the use of alcohol, cigarettes, marijuana and other drugs between the two groups was significant.



30-day Substance Use by SPIRIT Site. There were many differences among districts in the percentage of students who had used substances in the past month. These differences could be due to multiple factors, including, but not limited to, the location of each district, the demographic

profile and average age of the respondents, and the programs being implemented within each district.

Table 8. 30-day Substance Use Across SPIRIT Sites (6th – 9th grade)

	SPIRIT Total ¹	Carthage ²	Hickman Mills ³	Knox ⁴	New Madrid ⁵	Ritenour ⁶
Cigarettes	8.4	6.2	2.8	3.7	9.0	12.3
Alcohol	16.1	10.9	7.1	6.5	14.4	25.2
Marijuana	8.6	4.0	4.3	2.8	4.5	16.1
Inhalants	3.6	3.3	2.1	1.9	3.5	4.7
Prescription Drugs without Rx	4.4	4.0	1.4	1.9	4.0	6.5
Other Illegal Drugs	6.9	2.9	3.5	2.8	4.0	12.7

¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

²Carthage, spring 2009, 6th – 9th grade, n = 275 (average age = 13.32)

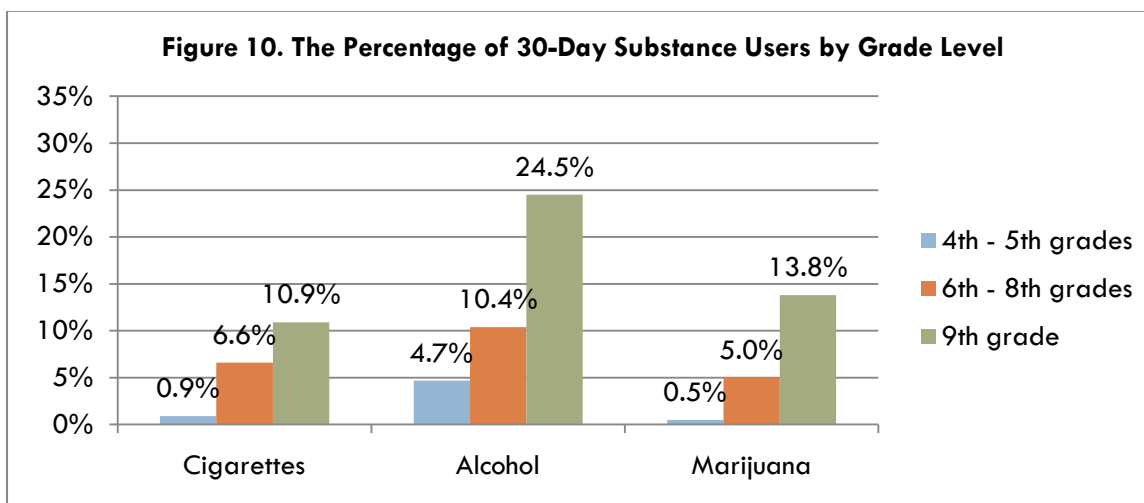
³Hickman Mills, spring 2009, 6th – 9th grade, n = 137 (average age = 13.29)

⁴Knox, spring 2009, 6th – 9th grade, n = 107 (average age = 13.23)

⁵New Madrid, spring 2009, 6th – 9th grade, n = 201 (average age = 13.73)

⁶Ritenour, spring 2009, 6th – 9th grade, n = 496 (average age = 14.10)

30-day Substance Use by Grade Level. The percentage of 30-day cigarette users increased between the 4th – 5th and 6th – 8th grade levels. The likelihood of alcohol use within the past month increased as the grade level increased.



30-day Substance Use by Site (4th-5th grade). The percentage of 4th-5th grade students who used any of the substances was so much lower than lifetime use that it suggested youth were experimenting rather than continuing use.

Table 9. 30-day Substance Use Across SPIRIT Sites (4th – 5th grade)

	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Cigarettes	0.9	0.0	1.0	1.4	0.0	1.3
Alcohol	4.7	1.5	6.2	1.4	2.2	6.9
Marijuana	0.5	0.0	1.0	0.0	0.0	0.8

30-day Substance Use by Sex. There was no difference in 30-day drug use between males and females.

Age of 1st Substance Use (Age of Initiation)

Age of 1st Substance Use Comparisons with State Samples. The age of first use of cigarettes was higher in SPIRIT than in Missouri, whereas the age at which youth first tried alcohol (more than a sip) and began using regularly was younger in SPIRIT than in Missouri.

Table 10. Comparison Between Estimates of SPIRIT and Missouri Age of 1 st Substance Use		
	SPIRIT Total ¹	MO ²
Cigarettes	11.76	11.31
Alcohol (more than a sip)	11.04	11.81
Alcohol (once or twice a month)	12.42	13.00
Marijuana	12.60	12.60
Ecstasy	11.26	---
Methamphetamine	11.08	---
Inhalants	11.60	---
Prescription Drugs without Rx	12.24	---

¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

² Missouri Student Survey (MSS) 2008, 6th – 9th grade, n = 86,861 (average age = 13.64)

Age of 1st Substance Use by SPIRIT Site. There were many differences among districts in the average age of first substance use. These differences could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 11. Age of 1 st Substance Use Across SPIRIT Sites (6 th – 9 th grade)						
	SPIRIT Total ¹	Carthage ²	Hickman Mills ³	Knox ⁴	New Madrid ⁵	Ritenour ⁶
Cigarettes	11.76	10.85	11.40	9.56	11.10	13.36
Alcohol (more than a sip)	11.04	10.85	10.58	10.35	11.34	11.28
Alcohol (once or twice a month)	12.42	12.47	12.83	12.25	11.79	12.85
Marijuana	12.60	13.00	11.40	11.00	13.05	12.80
Ecstasy	11.26	9.75	10.00	---	9.40	13.00
Methamphetamine	11.08	10.00	11.00	---	9.50	12.15
Inhalants	11.60	11.65	12.75	13.00	11.00	11.63
Prescription Drugs without Rx	12.24	12.24	10.33	13.00	11.70	12.73

¹ SPIRIT, spring 2009, 6th – 9th grade, n = 1163 (average age = 13.58)

² Carthage, spring 2009, 6th – 9th grade, n = 275 (average age = 13.32)

³ Hickman Mills, spring 2009, 6th – 9th grade, n = 137 (average age = 13.29)

⁴ Knox, spring 2009, 6th – 9th grade, n = 107 (average age = 13.23)

⁵ New Madrid, spring 2009, 6th – 9th grade, n = 201 (average age = 13.73)

⁶ Ritenour, spring 2009, 6th – 9th grade, n = 496 (average age = 14.10)

Age of 1st Substance Use by Sex. Males began using marijuana at an average age of 12.32, younger than females whose average age was 12.85.

Substance Use Extent and Circumstances

Extent of Substance Use. Within the past month, binge drinking, defined as drinking 5 or more drinks on the same occasion, was reported by 9.0% of 6th – 9th graders. Exactly the same

percentage of students, 9.0%, reported having been drunk or high at school at least once in the past 3 months. Although the percentage of binge drinkers and youth who were drunk or high at school was the same, the frequencies were not correlated. In other words, binge drinkers were no more likely than non-binge drinkers to have been drunk or high at school in the past three months.

Among 6th – 9th grade youth who reported drinking alcohol in the past 30-days, 39.0% reported having one drink or less on the days that they drank. Approximately a third of the sample, 34.6%, reported having 2 to 4 drinks, and the remaining 26.4% reported having five or more drinks on the days that they drank alcohol. When asked if they had five or more drinks on one occasion (binge drinking) in the past 30 days, only 9.0% of students reported doing so, however, 26.4% reported binge drinking on the occasions when they do drink, which were not necessarily within the past month.

Among those who reported smoking cigarettes in the past 30-days, 44.8% of students had less than one cigarette on the days that they smoked. Over 34% reported smoking 2-5 cigarettes, 10.4% smoked 6-15 cigarettes, 5.2% smoked about 1 pack (16-25 cigarettes), and the remaining 5.2% smoked 35 more cigarettes (about 2 packs) on the days that they smoked.

Substance Use and Automobiles. Students were also asked to indicate their experience with drunk driving, both as a driver and a passenger. Fewer students reported driving drunk (3.6%) than having ridden in a car with a driver than had been drinking (14.1%).

Summary

Lifetime and 30-Day Substance Use Comparisons with State and National Samples. The percentage of users of other drugs did not vary much between SPIRIT, Missouri, and the nation.

- **Cigarette use.** Around 23% of SPIRIT 6th – 9th grade students had ever smoked a cigarette in their lifetime. These rates were the same as youth in the Missouri and national samples. Around 8% of 6th – 9th grade students had smoked in the past 30 days, a rate similar to Missouri and the nation. The age of initiation was slightly higher among SPIRIT youth than Missouri youth.
 - Among youth who reported having smoked cigarettes in the past 30-days, almost half reported smoking less than one cigarette on the days that they smoked. Around 11% of smokers reported using at least one pack of cigarettes a day on the days that they smoked.
 - Among 4th – 5th graders, 30-day cigarette use was negligible at all sites.
 - There were no differences in cigarette use between males and females.
- **Alcohol Use.** About 48% of 6th – 9th grade students in SPIRIT had consumed alcohol in their lifetime, compared to 54% of Missouri youth and 38% of youth nationally. Thirty-day use of alcohol was similar among SPIRIT students (16%) and those in the U.S. (15%), and lower than Missouri youth (22%). Youth in the SPIRIT sample began drinking alcohol at a younger age than the Missouri sample of youth.
 - Of the 16% of 6th – 9th grade students who reported drinking alcohol in the past 30-days, a little more than 1/3 reported having one drink or less on the days that

they drank, 1/3rd reported having 2 to 4 drinks, and a little less than 1/3rd reported having five or more drinks on the days that they drank alcohol.

- Rates of use were similar for males and females, and increased by age.
 - 9% of 6th – 9th grade youth reported binge drinking (having 5 or more drinks on the same occasion).
 - Exactly the same percentage of students (9%) reported having been drunk or high at school at least once in the past 3 months.
 - 14% of youth reported having ridden in a car with a driver who had been drinking.
- *Marijuana Use.* 16% of 6th – 9th grade SPIRIT students reported using marijuana at some time in their life, the same percentage as those in the U.S. sample but higher than the sample of Missouri youth. Around 9% of SPIRIT 6th-9th graders had used marijuana in the past 30 days; higher than both Missouri and the nation. The age of first use was similar to Missouri rates.
 - Males began using marijuana at an average age of 12.32, whereas females began using marijuana at an older age, 12.85.
 - Marijuana use by 4th-5th graders was negligible.
 - *Inhalants.* Around 8% of 6th – 9th grade SPIRIT youth used inhalants at some time in their life, lower than both the Missouri and national samples. Around 4% had used in the past 30 days; less than the Missouri sample but higher than the U.S. sample. Use by the SPIRIT and Missouri samples is about 4 times the use reported nationally.
 - *Other drugs.* Around 8% of SPIRIT youth said they had used prescription drugs without a doctor's prescription, around 2% reported using methamphetamines and 2% reported using ecstasy.

Chapter 4 - Substance Use Attitudes

Students in the 4th – 9th grades were asked to report on their attitudes toward substance use. Specifically, they were asked about the extent to which they thought most teenagers and adults used drugs, whether they might use drugs when they were older, how risky drugs were to the health of those who use, and how wrong they thought the use of drugs was. The majority of students (91.2%) strongly disagreed that smoking makes you look cool. Most (85.3%) also strongly disagreed that smoking cigarettes makes you look more grown-up. Fewer students, but still a majority (71.4%), strongly disagreed that drinking lets you have more fun.

Substance Use Norms

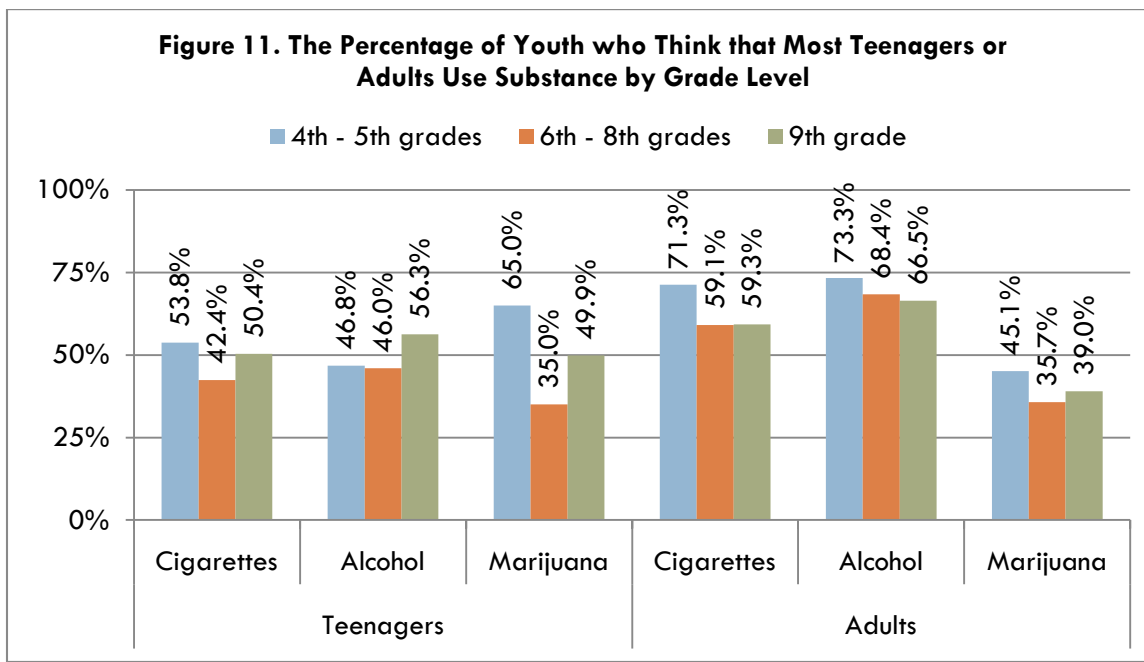
Approximately 40% of students thought that most teenagers and adults use marijuana. Students were more likely to think that most adults use cigarettes or alcohol than most teenagers. Slightly less than 50% believed that most teenagers use cigarettes or alcohol. A greater percentage, 65%, thought that most adults use cigarettes, and 70% thought that most adults use alcohol.

Table 12. Youths' Perception of Substance Use among Adults and Teenagers (Response to the statement: Most teenagers/adults use "substance.")					
		Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Teenagers	Cigarettes	25.5	25.0	35.5	13.9
	Alcohol	24.2	27.2	34.4	14.2
	Marijuana	35.3	25.9	26.5	12.3
Adults	Cigarettes	16.4	18.7	40.7	24.1
	Alcohol	16.3	13.5	40.3	30.0
	Marijuana	32.0	27.3	26.6	14.1

Substance Use Norms by SPIRIT Site. The percentage of youth who thought that most teenagers and adults used substances varied by district. These differences could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 13. Youths' Perception of Substance Use among Adults and Teenagers by Site (Response to the statement: Most teenagers/adults use "substance." Strongly & Somewhat Agree combined Percentages)							
		SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Teenagers	Cigarettes	49.4	44.7	39.1	30.7	51.9	56.7
	Alcohol	48.6	38.9	52.3	33.7	53.0	54.2
	Marijuana	38.8	28.4	41.9	13.9	40.0	47.5
Adults	Cigarettes	64.8	55.4	51.5	54.7	69.6	72.8
	Alcohol	70.3	46.5	75.5	57.8	66.6	78.6
	Marijuana	40.7	31.8	40.2	22.0	43.7	47.2

Substance Use Norms by Grade Level. The most prominent pattern of perceived substance use norms was the tendency for students in 4th – 5th grades to think most teenagers and adults used substances. Fourth and fifth grade students were more likely than youth in higher grade levels to think that most teenagers use marijuana and most adults use cigarettes, alcohol, or marijuana. Students in the 6th – 8th grades were the least likely to think that most teenagers used cigarettes and marijuana. Students in 9th grade were the most likely to think that most teenagers used alcohol.



Substance Use Norms by Sex. Males and females did not differ in their perceptions of substance use norms among teenagers or adults.

Substance Use Intentions

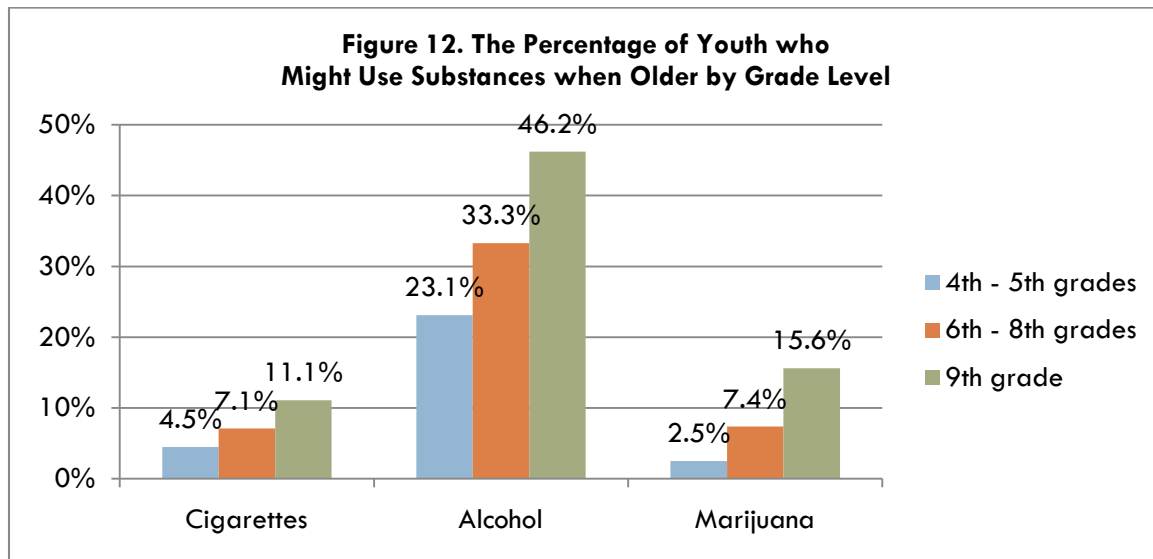
Students were more likely to indicate they might use alcohol in the future than cigarettes or marijuana, with 30.5% agreeing or strongly agreeing that they might use alcohol. Approximately 7% of students reported that they agreed or strongly agreed they might use cigarettes or marijuana in the future.

Table 14. Youths' Intention to Use Substances (Response to the statement: I might use "substance" when I get older.)				
	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Cigarettes	81.8	11.4	4.8	2.0
Alcohol	52.8	16.7	21.8	8.7
Marijuana	86.3	6.6	3.7	3.4

Substance Use Intentions by SPIRIT Site. Regardless of district, students were more likely to indicate they might use alcohol than cigarettes or marijuana. The differences between districts could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 15. Youths' Intention to Use Substances By Site (Strongly & Somewhat Agree combined Percentages)						
	SPiRiT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Cigarettes	6.8	4.2	5.5	3.3	7.1	8.7
Alcohol	30.5	20.5	18.5	16.2	25.1	40.7
Marijuana	7.1	3.8	6.1	1.2	3.9	11.1

Substance Use Intentions by Grade Level. Students' intentions to use substances increased as grade level increased, such that youth in the 4th – 5th grades were the least likely to report they might use substances when older and those in 9th grade were the most likely to using consider substance use.



Substance Use Intention by Sex. Males and females were equally as likely to report that they might use cigarettes, alcohol, or marijuana in the future.

Risk of Harm from Substance Use

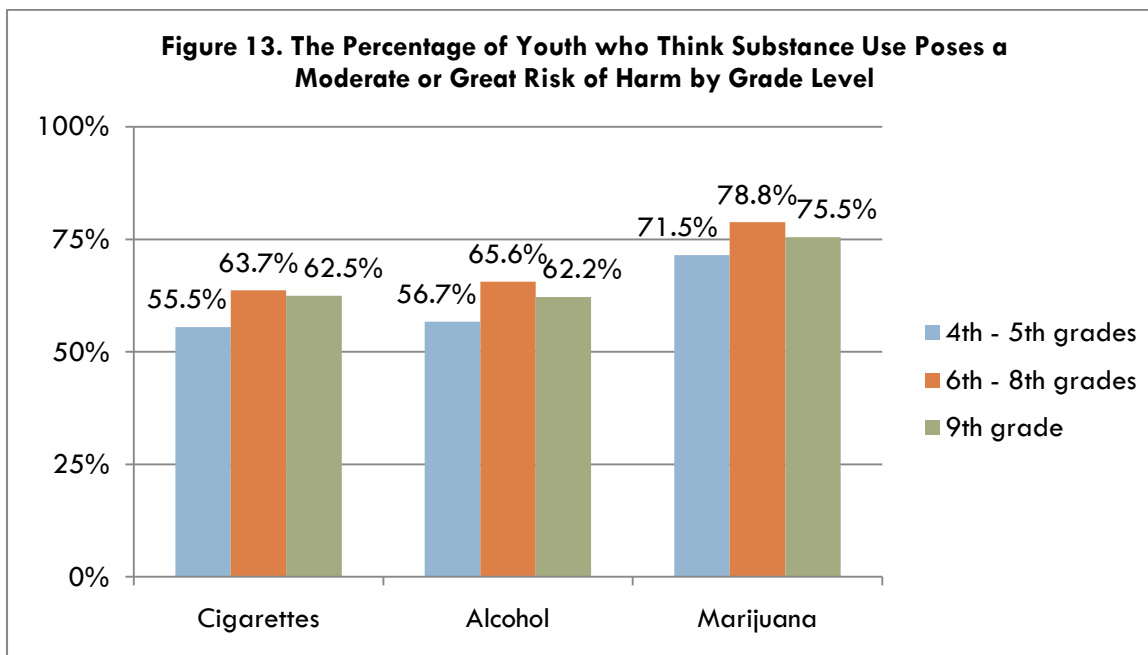
Youth were asked to indicate how much they thought people risked harming themselves physically, or in other ways, if they use substances. Approximately 60% of students thought that the use of cigarettes and alcohol posed a moderate to great risk of harm. Around three quarters of the sample thought that marijuana use posed a moderate to great risk if used. Almost all participants, over 85%, reported that ecstasy, methamphetamine, inhalants, and the use of prescription drugs without a prescription were risky.

Table 16. Youths' Perception of Risk of Harm from Using Substances				
	No Risk	Slight Risk	Moderate Risk	Great Risk
Smoke part or all of a cigarette	17.0	23.3	30.3	29.0
Drink any type of alcohol	14.9	24.3	32.3	28.5
Use Marijuana	16.2	9.0	17.7	57.1
Use ecstasy occasionally	7.4	6.9	19.4	66.3
Use meth occasionally	7.1	4.1	13.4	75.3
Use inhalants	7.5	5.6	17.8	69.1
Use prescription drugs w/out Rx	7.2	5.6	19.4	67.8

Risk of Harm by SPIRIT Site. Any differences between districts in the percentage of youth who perceived substance use to pose a moderate or great risk of harm could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 17. Youths' Perception of Risk of Harm from Using Substances by Site (Moderate & Great Risk combined Percentages)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Smoke part or all of a cigarette	59.3	63.3	51.9	65.9	65.5	56.7
Drink any type of alcohol	60.8	63.6	54.9	62.0	69.9	57.7
Use Marijuana	74.8	76.4	65.1	86.3	82.2	72.0
Use ecstasy occasionally	85.7	86.5	85.5	91.6	87.0	84.0
Use meth occasionally	88.7	90.8	87.7	94.3	88.0	87.0
Use inhalants	86.9	87.5	87.0	91.8	88.5	84.9
Use prescription drugs w/out Rx	87.2	89.0	88.4	94.3	85.5	85.2

Risk of Harm by Grade Level. Students in the 4th – 5th grades were less likely than youth in the higher grade levels to think that the use of any substance, especially cigarettes, was risky. Only 55.5% of 4th – 5th grade students thought that using cigarettes posed a moderate or great risk of harm, whereas approximately 63% of 6th-8th and 9th graders thought cigarette use was risky.



Risk of Harm by Sex. Males and females associated a similar extent of risk with the various substances.

Disapproving Attitudes toward Substance Use

Although most thought that the use of any substance was wrong, students were less likely to think that using alcohol was wrong. Over 73% of students thought using cigarettes, marijuana, ecstasy, methamphetamine, inhalants, or the unintended use of prescription medications was very wrong.

Table 18. Youths' Perception of Wrongfulness of Substance Use

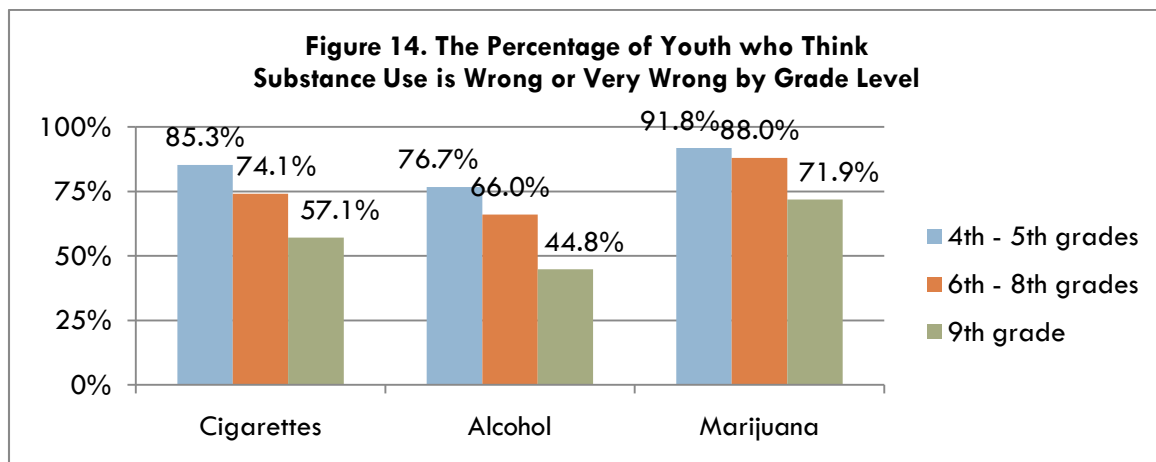
	Not Wrong at All	A Little Bit Wrong	Wrong	Very Wrong
Smoke part or all of a cigarette	8.8	15.6	25.3	50.3
Drink any type of alcohol	11.8	21.8	21.9	44.4
Use Marijuana	7.5	6.5	12.3	73.7
Use ecstasy occasionally	4.0	5.0	16.5	74.5
Use meth occasionally	4.3	3.3	13.0	79.4
Use inhalants	4.4	4.6	14.4	76.6
Use prescription drugs w/out Rx	3.6	5.5	14.7	76.1

Disapproving Attitudes by SPIRIT Site. There were many differences among districts in the percentage of students who had used substances. These differences could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 19. Youths' Perception of Wrongfulness of Substance Use by Site
(Wrong & Very Wrong combined Percentages)

	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Smoke part or all of a cigarette	75.6	77.4	79.5	82.0	76.5	72.4
Drink any type of alcohol	66.3	73.5	72.6	73.6	73.8	57.3
Use Marijuana	86.0	89.4	83.7	97.5	91.7	81.1
Use ecstasy occasionally	91.0	92.3	94.2	97.2	92.5	87.0
Use meth occasionally	92.4	93.4	96.4	96.3	93.9	88.9
Use inhalants	91.0	91.2	94.9	97.1	91.9	87.7
Use prescription drugs w/out Rx	90.8	92.3	96.4	96.2	91.5	86.6

Disapproving Attitudes by Grade Level. Students in higher grade levels were less likely than youth in the lower grades to think that using substances was wrong. There was a decrease in the percentage of students who thought using cigarettes or alcohol was wrong at each grade level, such that approximately 10% fewer youth in the 6th – 8th grades thought using cigarettes or alcohol was wrong than youth in the 4th – 5th grades. There was a 17% to 20% decrease in the percentage of students who thought cigarette or alcohol use was wrong from the 6th – 8th to the 9th grade. The percentage of youth who thought the use of marijuana was wrong, however, did not decrease until the 9th grade level, with 16 to 20% fewer youth in the 9th grade reporting marijuana use as more wrong than students in the lower grade levels.



Summary

- *Substance Use Norms.* Approximately 40% of students thought that *most* teenagers and adults use marijuana. Students were more likely to think that adults used compared to teenagers. For the most part, younger students were more likely to believe that most teens and adults used substances than older youth.
- *Substance Use Intentions.* Students were more likely to indicate that they might use alcohol in the future than cigarettes or marijuana, with around 1/3rd agreeing that they might use alcohol, compared to 7% who thought they might use cigarettes or marijuana.
- *Risk of Harm from Substance Use.* Over 85% of students thought that the use of ecstasy, methamphetamine, inhalants, and prescription drugs without a prescription was harmful. Around three quarters thought marijuana was harmful and approximately 60% of youth thought that the use of cigarettes and alcohol posed a moderate to great risk of harm.
 - Younger students were less likely than those in the higher grade levels to think that the use of any substance was risky, especially when considering the use of cigarettes. Only 55% of 4th – 5th graders thought that using cigarettes posed a moderate or great risk of harm, whereas approximately 63% of 6th-8th and 9th graders thought cigarette use was risky.
- *Disapproving Attitudes toward Substance Use.* Although most thought that the use of any substance was wrong, students were less likely to think that using alcohol was wrong compared to the use of the other substances. Over 73% of students thought using marijuana, ecstasy, methamphetamine, inhalants, or the unintended use of prescription medications was very wrong.
 - Youth in higher grade levels were less likely than youth in the lower grades to think that using substances was wrong.

Chapter 5 - Aggression & Problem Behavior

Aggression and problem behavior were measured differently depending on grade level. Classroom teachers of children in kindergarten through third grades completed a questionnaire based on their observations of the typical behavior of their students. Youth in the 4th – 9th grades self-reported their problem behavior. They were asked to report how many times they participated in problem behavior or were the victim of bullying or aggression in the three months prior to survey administration.

Aggression in Children (Kdg. – 3rd grade)

Of those very few who were identified as being aggressive, children were more likely to be characterized as being reactively than proactively aggressive by teachers. The most common aggressive behavior identified was claiming that other children were to blame in a fight and starting trouble; this was found to be usually true or almost always true of approximately 16% of children.

Table 20. Observed Extent of Aggressive Behavior

	Never	Rarely True	Sometimes True	Usually True	Almost Always True
Reactive Aggression					
When this child has been teased or threatened, he or she gets angry easily and strikes back.	30.3	28.8	25.0	9.6	6.3
This child always claims that other children are to blame in a fight and feels that they started the trouble.	32.3	26.4	21.8	11.2	8.2
When a peer accidentally hurts the child, this child...overreacts with anger/fighting.	39.6	26.1	19.4	9.5	5.5
Proactive Aggression					
This child gets other kids to gang up on a peer that he or she does not like.	59.3	24.9	10.8	3.7	1.3
This child uses physical force (or threatens to use force) in order to dominate other kids.	63.6	20.8	10.1	3.5	2.0
This child threatens or bullies others in order to get his or her way.	61.4	22.1	10.8	3.7	2.0

Problem Behavior by SPIRIT Site. Any differences between districts in the percentage of children characterized as reactively or proactively aggressive could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 21. Observed Extent of Aggressive Behavior by Site (Usually or Almost Always True, combined Percentages)					
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid
Reactive Aggression					
When this child has been teased or threatened, he or she gets angry easily and strikes back.	15.9	13.5	21.3	14.4	18.1
This child always claims that other children are to blame in a fight and feels that they started the trouble.	19.4	16.9	21.3	19.8	22.0
When a peer accidentally hurts the child, this child overreacts with anger/fighting.	14.9	13.2	15.8	12.6	18.1
Proactive Aggression					
This child gets other kids to gang up on a peer that he or she does not like.	5.0	4.1	10.7	1.8	6.0
This child uses physical force (or threatens to) in order to dominate other kids.	5.5	4.4	9.5	1.8	7.5
This child threatens or bullies others in order to get his or her way.	5.7	4.7	9.3	2.7	7.4

Problem Behavior by Sex. More males than females were described as usually or almost always aggressive when reacting to situations such as being teased or threatened, accidentally hurt, or getting into a fight with another child.

Table 22. Observed Extent of Aggressive Behavior by Sex (Usually or Almost Always True, combined Percentages)		
	Male	Female
Reactive Aggression		
When this child has been teased or threatened, he or she gets angry easily and strikes back.	20.9	11.0
This child always claims that other children are to blame in a fight and feels that they started the trouble.	25.1	13.6
When a peer accidentally hurts the child, this child...overreacts with anger/fighting.	20.1	9.8
Proactive Aggression		
This child gets other kids to gang up on a peer that he or she does not like.	5.7	4.3
This child uses physical force (or threatens to use force) in order to dominate other kids.	6.9	4.1
This child threatens or bullies others in order to get his or her way.	6.9	4.6

Problem Behavior in Youth (4th – 9th grade)

Over 50% of 4th – 9th grade youth reported making fun of others, being made fun of, or having rumors or lies spread about them the past three months. Youth were more likely to report having rumors spread about them (51.1%) than spreading rumors about others (28.3%). The behaviors least likely to be reported were spreading rumors about others, being in a physical fight, and being afraid of being beaten up.

Table 23. Frequency of Problem Behavior in Past 3 months

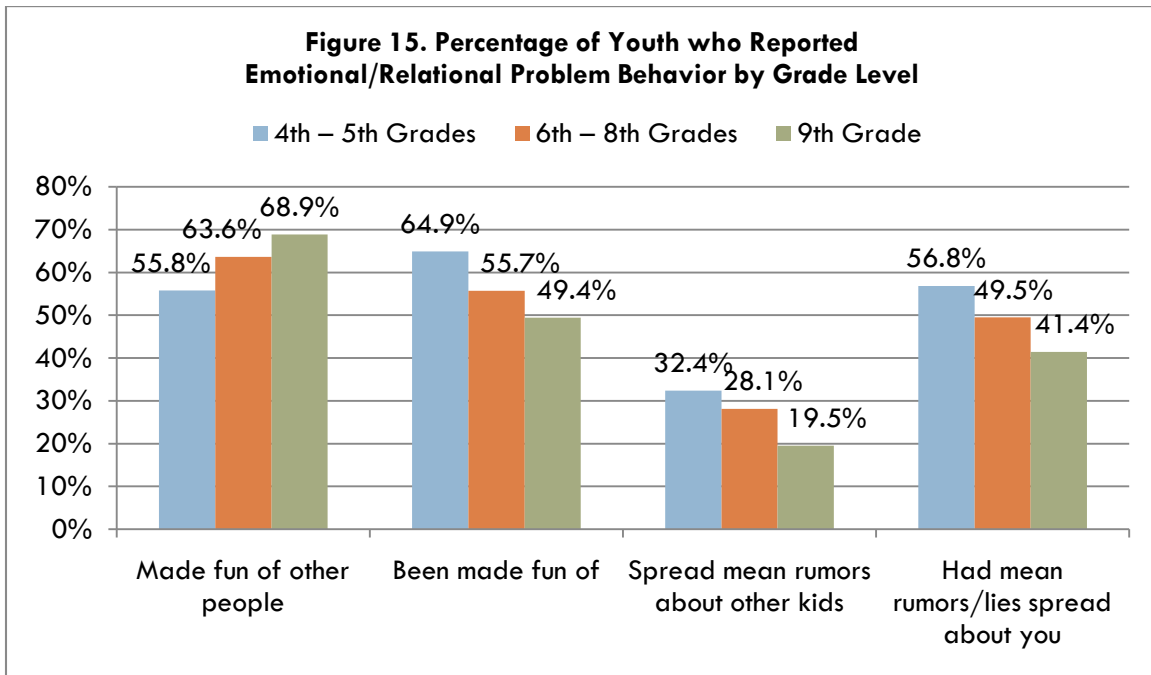
	Never	1-2 times	3-5 times	6-9 times	10 or more times
Made fun of other people	38.9	30.3	10.6	6.1	14.1
Been made fun of	41.4	28.3	11.1	5.6	13.7
Spread mean rumors about other kids	71.7	18.0	4.8	1.9	3.6
Had mean rumors/lies spread about you	48.9	27.3	10.5	4.9	8.4
Hit/pushed other kids at school	57.8	21.7	9.5	4.2	6.8
Been pushed/shoved/slapped/hit/kicked	59.4	19.4	7.6	4.1	9.4
Been harassed/bullied	59.9	20.1	8.5	3.1	8.3
Been in a physical fight	72.4	14.5	6.0	2.4	4.7
Been afraid of being beaten up	78.0	11.9	4.5	1.5	4.1

Problem Behavior by SPIRIT Site. Variations between the districts in the percentage of youth reporting having performed or experienced problem behavior in the past three months could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

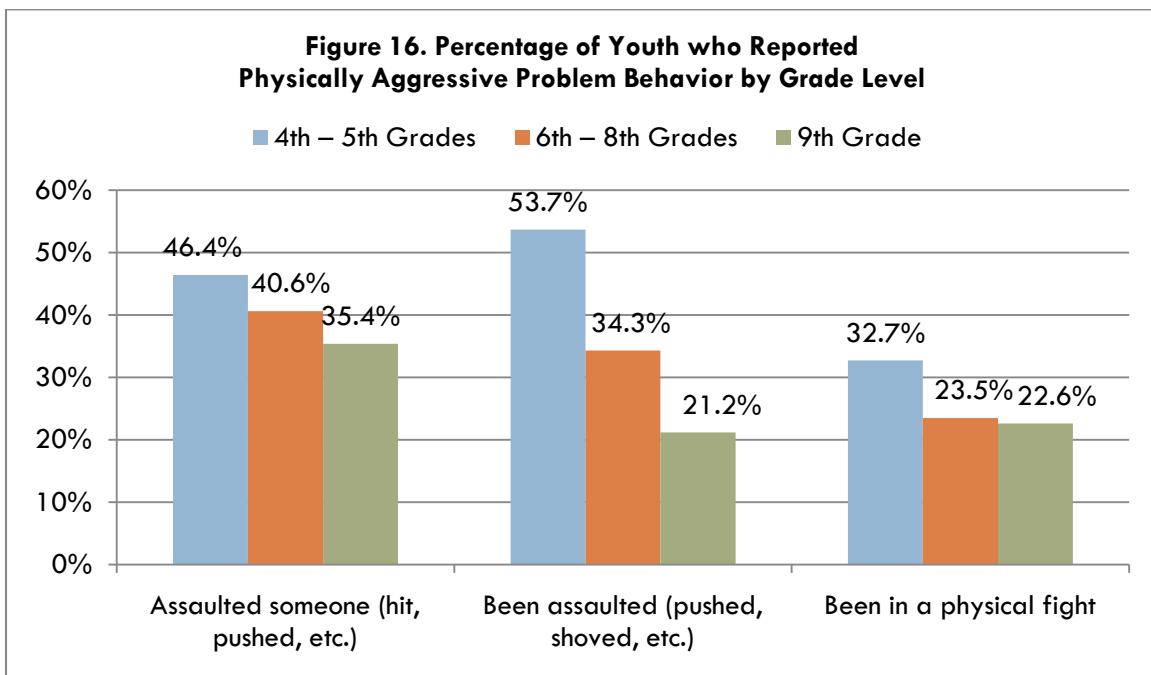
Table 24. Problem Behavior by Site
(1 or more times in past 3 months)

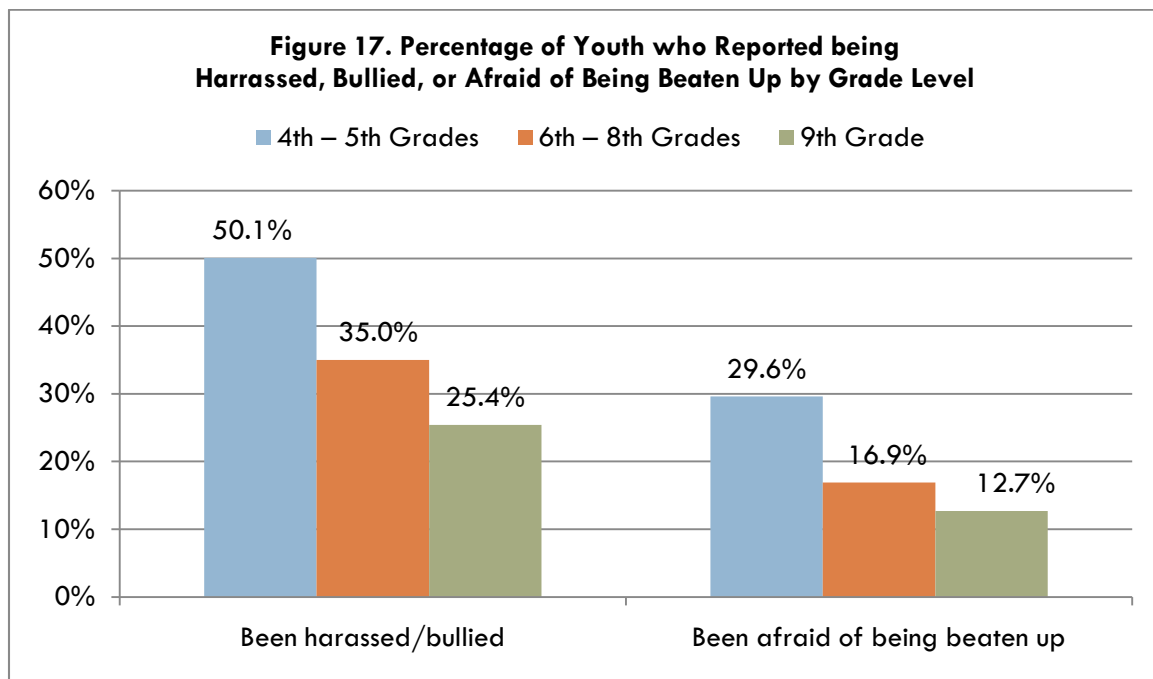
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Made fun of other people	61.1	51.7	63.4	41.6	61.7	68.6
Been made fun of	58.6	52.9	53.9	61.4	59.9	61.7
Spread mean rumors about other kids	28.3	24.8	28.8	19.0	24.6	32.8
Had mean rumors/lies spread about you	51.1	46.7	48.7	49.4	54.0	53.2
Hit/pushed other kids at school	42.2	34.3	45.3	26.8	40.2	48.9
Been pushed/shoved/slapped/hit/kicked	40.6	42.3	42.1	33.3	36.3	42.1
Been harassed/bullied	40.1	39.9	34.0	38.2	37.9	42.7
Been in a physical fight	27.6	23.8	34.3	14.0	24.3	31.6
Been afraid of being beaten up	22.0	22.0	21.6	19.0	20.4	23.1

Problem Behavior by Grade Level. The percentage of youth who reported making fun of others in the past three months increased as grade level increased. Other emotional/relational problem behaviors, however, showed the opposite pattern, with fewer youth reporting being made fun of, spreading rumors, or having rumors spread about them as grade level increased.



The percentage of youth who reported being involved in physical aggression or being harassed or bullied in the past three months decreased as grade level increased. The most dramatic difference between grade levels was in the percentage of youth who had been physically assaulted (pushed, shoved, etc.).





Problem Behavior by Sex. Females were more likely than males to report that they had rumors or lies spread about them or were harassed or bullied in the past 3 months. Males were more likely to report being the victim of or the aggressor of physical aggression. For example, in the three months prior to the survey males were more likely than females to have assaulted others (hit or pushed), been assaulted (pushed, shoved, slapped, hit or kicked), been in a physical fight, or been afraid of being beaten up.

Experience with Weapons

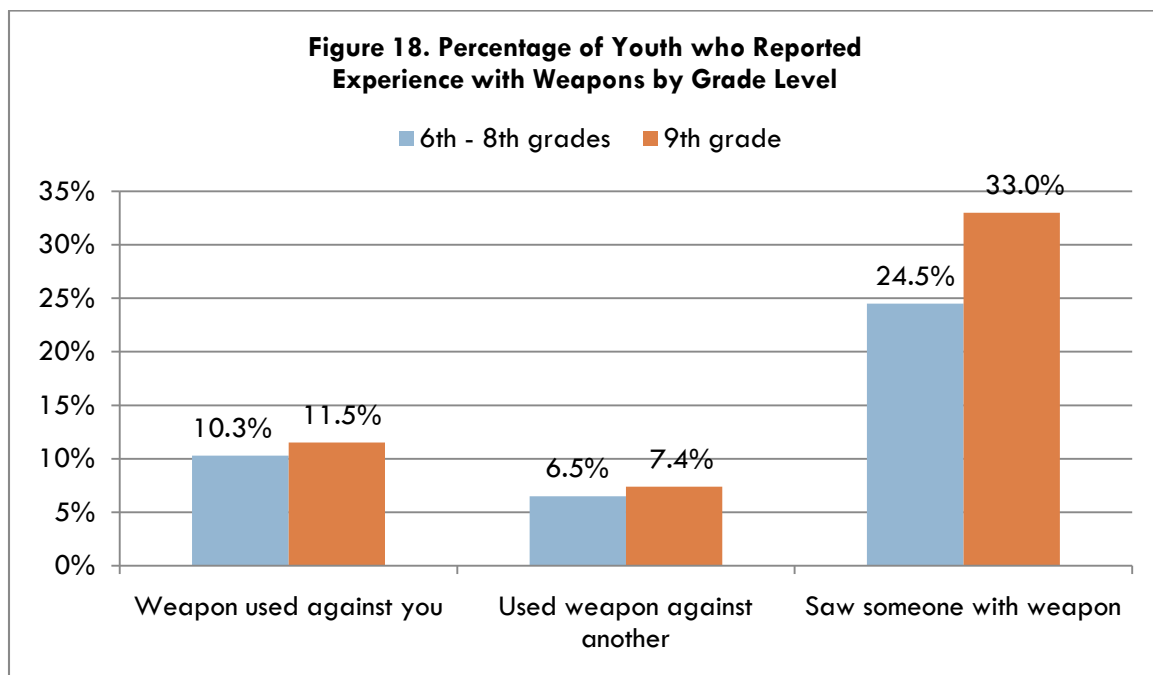
A low percentage of 6th – 9th grade students reported experiences with weapons, with 10.8% having been threatened or injured with a weapon and 6.9% having used a weapon against someone else in the past three months. A greater percentage, 27.9%, reported seeing someone carrying a weapon. Because no information was collected about the circumstances under which the weapon was seen are unknown, the high incidence of this event should be interpreted with caution.

Table 25. Frequency of Experience with Weapons in Past 3 months					
	Never	1-2 times	3-5 times	6-9 times	10 or more times
Been threatened or injured with weapon	89.2	6.5	1.6	0.8	2.0
Used any weapon to threaten or bully	93.1	3.3	1.6	0.8	1.2
Seen someone carrying a weapon	72.1	17.4	5.2	1.7	3.7

Experience with Weapons by SPIRIT Site. The variation between districts in the percentage of youth reporting having had experience with weapons in the past three months could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 26. Frequency of Experience with Weapons by Site (1 or more times in past 3 months)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Been threatened or injured with weapon	10.8	9.9	7.3	2.9	9.0	15.0
Used any weapon to threaten or bully	6.9	4.7	9.4	1.9	5.0	9.4
Seen someone carrying a weapon	27.9	20.3	20.1	9.3	25.5	40.5

Experience with Weapons by Grade Level. Students in 6th – 8th grades and the 9th grade were just as likely to have had a weapon used against them or to have used a weapon against someone else. Students in the 9th grade were more likely than their younger counterparts to have seen someone carrying a weapon in the past three months.



Experience with Weapons by Sex. Males were more likely than females to report being threatened or injured with a weapon or to have seen someone carrying on in the past three months. Females were just as likely as males to have used any weapon to threaten or bully someone else.

Summary

- *Problem behaviors (Kdg.-3rd grades).* Very few young students were described as being reactively or proactively aggressive. Teachers were more likely to characterize a child as reactively rather than proactively aggressive.
- *Problem behaviors (4th – 9th grades).* In the past three months, over 50% of 4th – 9th grade youth reported making fun of others, being made fun of, or having rumors or lies spread about them. The behaviors least likely to be reported were spreading rumors about others, being in a physical fight, and being afraid of being beaten up.
 - Most problem behaviors were more severe among younger students.

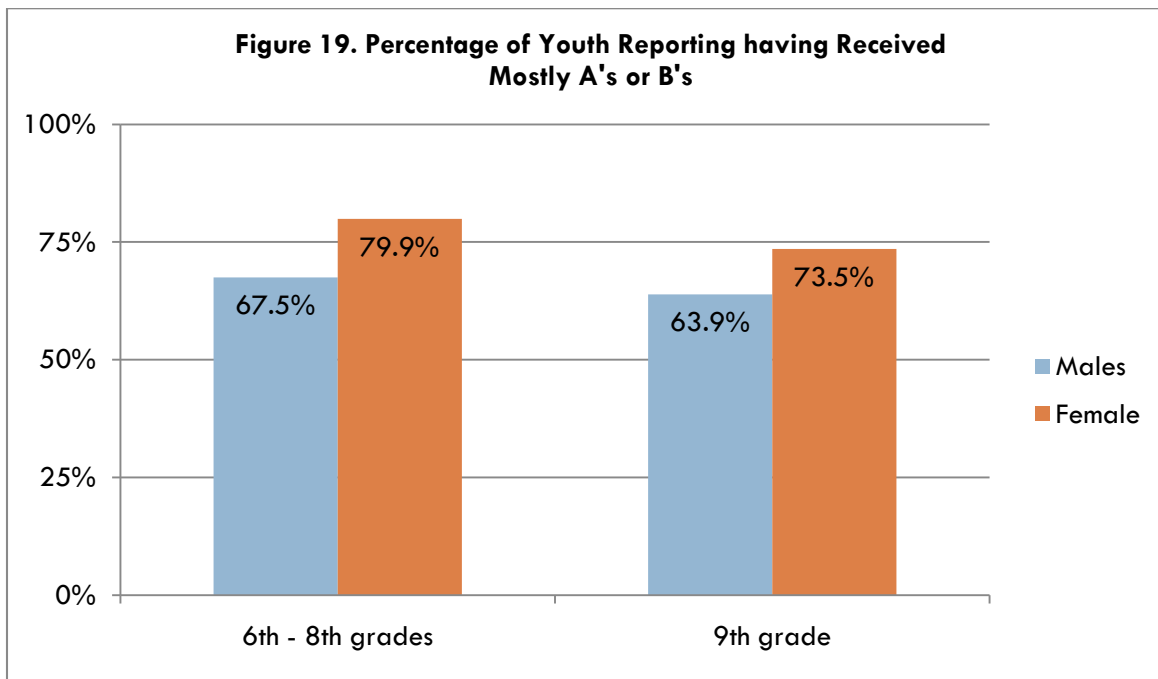
- Females were more likely to report they had rumors or lies spread about them or were harassed or bullied in the past 3 months.
- Males were more likely to be the victim of or the aggressor of physical aggression.
- *Weapons (6th – 9th grades).* The percentage of 6th – 9th grade students reporting experience with weapons was low. 11% reported that they had been threatened or injured with a weapon; 7% had used a weapon against someone else in the past three months.
 - Males were more likely than females to report having been threatened or injured with a weapon or to have seen someone carrying on in the past three months. However, females were just as likely as males to have used any weapon to threaten or bully someone else.
- *Problem behaviors (Kdg.-3rd grades).* Very few young students were described as being reactively or proactively aggressive. Teachers were more likely to characterize a child as reactively rather than proactively aggressive.
- *Problem behaviors (4th – 9th grades).* In the past three months, over 50% of 4th – 9th grade youth reported making fun of others, being made fun of, or having rumors or lies spread about them. The behaviors least likely to be reported were spreading rumors about others, being in a physical fight, and being afraid of being beaten up.
 - Most problem behaviors were more severe among younger students.
 - Females were more likely to report they had rumors or lies spread about them or were harassed or bullied in the past 3 months.
 - Males were more likely to be the victim of or the aggressor of physical aggression.
- *Weapons (6th – 9th grades).* The percentage of 6th – 9th grade students reporting experience with weapons was low. 11% reported that they had been threatened or injured with a weapon; 7% had used a weapon against someone else in the past three months.
 - Males were more likely than females to report having been threatened or injured with a weapon or to have seen someone carrying on in the past three months. However, females were just as likely as males to have used any weapon to threaten or bully someone else.

Chapter 6 - School Performance & Attitudes

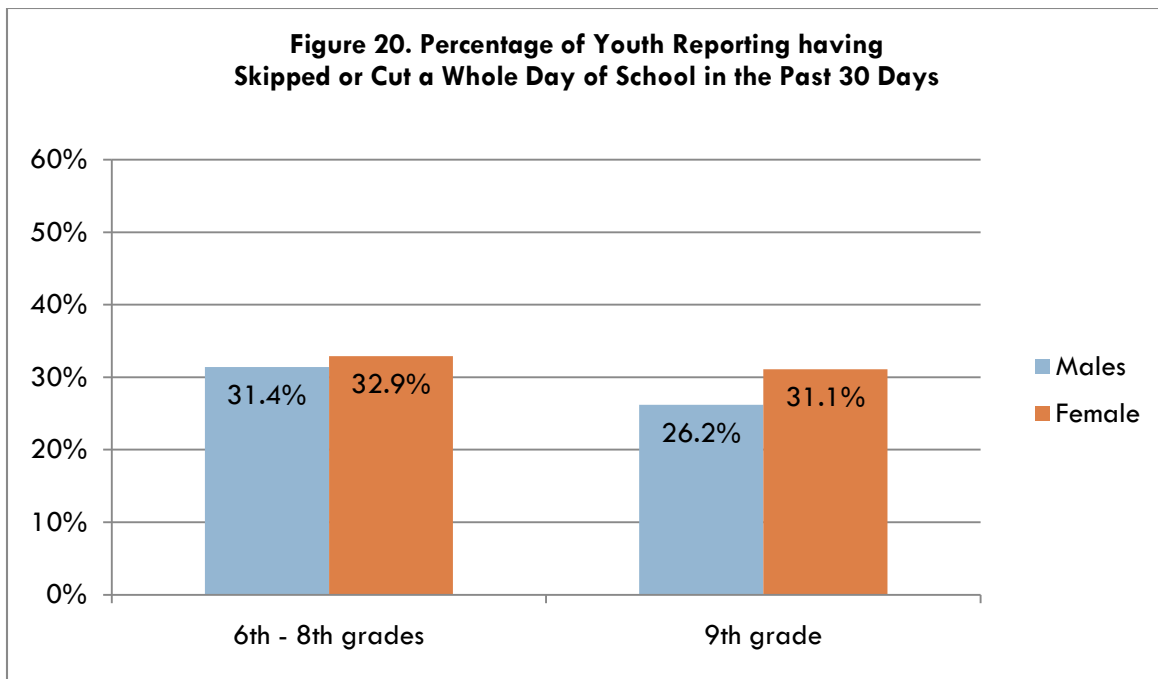
School performance and attitude data were collected from students in the 6th – 9th grade. They were asked to report their average grades, the number of times they skipped school, and 4th – 9th graders were asked the number of times they received discipline in the form of in-school suspension/detention or out-of-school suspension. This is a departure from previous evaluations of the SPIRIT project in which each participating school district was asked to provide school performance data. The change in data collection was made because of the unreliability and difficulty of collecting these data.

Grades, Absences, & Disciplinary Incidents

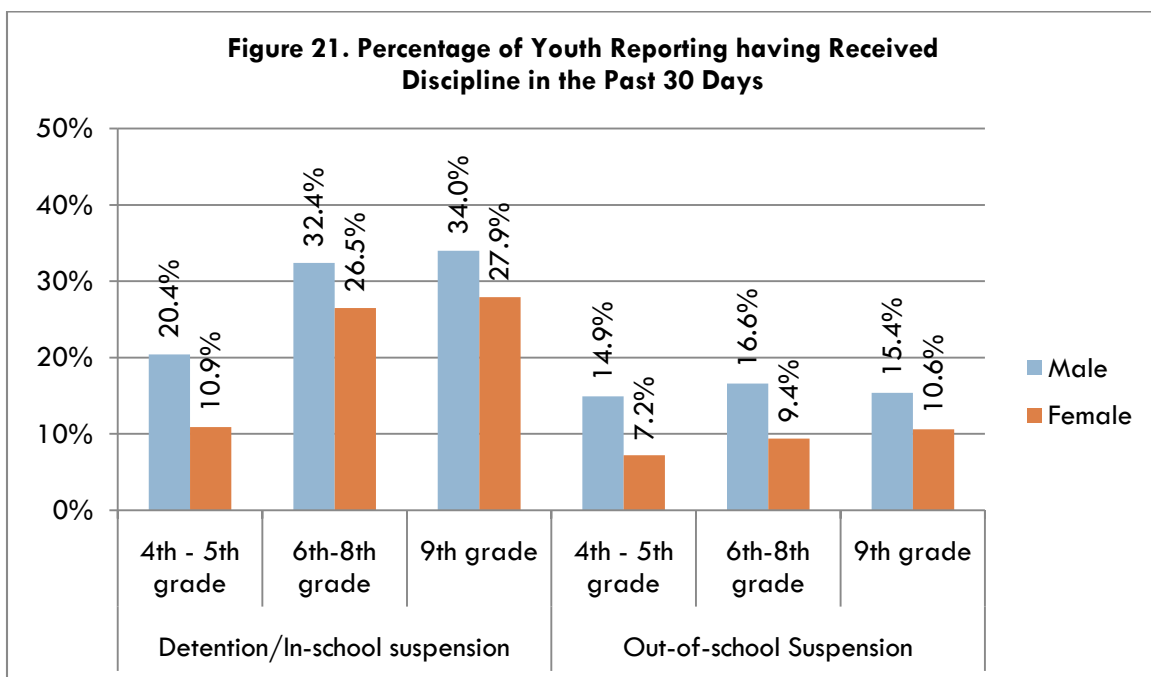
The majority of students (71.8%) reported average grades last school year of either A's or B's. A greater percentage of females reported mostly A's or B's than did males. Slightly more youth in the 6th – 8th grades received A's and B's than those in the 9th grade.



When asked how many whole days of school were missed because of skipping or cutting in the past 30 days, 30.7% of students reported missing at least one day. Only 2.1% of students reported skipping ten or more days. Males and females and students at different grade levels were equally as likely to have skipped a whole day of school within the past month.



A greater percentage of 4th – 9th grade youth reported receiving in-school suspensions or detentions (23.2%) than out-of-school suspensions (12.0%) in the past 3 months. Regardless of grade level, males were more likely than females to have received some sort of school discipline. Out-of-school suspensions were equally distributed across grade levels. The percentage who received detentions or in-school suspension, however, was lowest among 4th – 5th grade students.



Attitudes toward School

Youth in the 4th – 9th grades reported their attitudes toward school by the extent to which they agreed or disagreed with statements concerning their happiness, safety, and connectedness. Overall, the majority of youth had positive attitudes toward school. Over a quarter of students (27.3%), however, did not think that teachers treated them fairly.

Table 27. Attitudes toward School				
	Strongly Disagree	Disagree	Agree	Strongly Agree
I feel close to people at this school.	5.0	10.1	57.1	27.8
I am happy to be at this school.	7.8	13.3	42.7	36.2
I feel like I am a part of this school.	6.6	13.0	44.5	35.9
The teachers at this school treat students fairly.	9.6	17.7	40.9	31.8
I feel safe at this school.	5.6	10.6	42.6	41.1
I feel safe going to and from this school.	4.8	8.9	39.8	46.5

Attitudes toward School by SPIRIT Site. There were a few differences among districts in youths' attitudes toward school. These differences could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 28. Attitudes toward School by Site (Somewhat and Strongly Agree, combined Percentages)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
I feel close to people at this school.	84.9	85.5	83.3	90.5	86.1	83.5
I am happy to be at this school.	78.9	82.8	72.8	87.1	83.7	75.2
I feel like I am a part of this school.	80.4	81.9	78.7	87.1	88.1	76.1
The teachers at this school treat students fairly.	72.7	80.3	50.4	83.7	78.0	70.4
I feel safe at this school.	83.8	89.1	78.6	93.2	89.9	78.4
I feel safe going to and from this school.	86.3	90.5	80.3	96.1	90.2	82.5

Attitudes toward School by Grade Level. Positive attitudes toward school were least likely to be reported by students in the 9th grade. A similar percentage of youth in the 4th – 5th and 6th – 8th grades indicated that they were connected to school and that students were happy there and felt safe going to and from it. Interestingly, the percentage of youth who reported teachers treated students fairly decreased at the 6th – 8th grade level. In other words, middle school and junior high level youth were just as likely as youth in the 9th grade to think that they were treated unfairly by teachers.

Attitudes toward School by Sex. In general, more females reported positive attitudes toward school than males. Females were especially more likely to feel close to people and feel like a part of the school.

Summary

- **Grades.** The majority of students (71.8%) reported average grades last school year of either A's or B's, with females reporting higher grades than males.
- **Attendance.** Although very few students (2.1%) reported skipping 10 or more days, 30.7% of students reported missing at least one day for these reasons.

- *Discipline.* Fourth – 9th grade students reported receiving in-school suspensions or detentions (23.2%) at almost twice the rate as out-of-school suspensions (12.0%) in the past 3 months.
- *Attitudes toward school.* Generally students held positive attitudes about school.

Chapter 7 - Program Effectiveness

Children and youth in the second through ninth grades responded to questions regarding their satisfaction with the program and the extent to which they thought the program was effective in meeting its intended goals. Questions were asked such as whether programs taught anger management and resistance skills and increased self-esteem. The majority of youth liked the program at least a little (83.5%) and most thought the program was effective, especially in helping them with resistance skills and anger management. The area in which the program was thought to be least effective was in getting others to be nicer.

Table 29. Effectiveness of and Satisfaction with SPIRIT

	No, not at all	No, not much	Yes, a little	Yes, a lot
Did you like the program?	7.0	9.5	37.9	45.6
Did the program teach you what to do when you are angry?	9.8	11.9	31.9	46.4
Do you act better because of the program?	12.3	18.3	36.5	32.9
Did the program help you feel better about yourself?	12.3	16.1	31.9	39.7
Does the program help you to say no to harmful things other kids might want you to do?	8.6	8.8	27.2	55.4
Has the program helped you to get along better with other people?	12.1	17.5	34.5	35.8
Are other kids nicer to you because of the program?	22.8	26.9	27.9	22.4
Was the time spent on the program helpful?	10.2	10.7	33.7	45.4

Program Effectiveness by SPIRIT Site. There were many differences among districts in the percentage of students who thought the program was effective in the various areas. These differences could be due to multiple factors, including, but not limited to, the grade level composition of each particular district and the programs being implemented within each district.

Table 30. Effectiveness of and Satisfaction with SPIRIT by Site (Yes, a lot & Yes, a little, combined Percentages)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
Did you like the program?	83.5	82.3	89.1	82.5	81.9	83.6
Did the program teach you what to do when you are angry?	78.3	77.7	80.6	82.2	79.9	76.5
Do you act better because of the program?	69.4	70.4	73.5	77.9	73.1	63.9
Did the program help you feel better about yourself?	71.6	73.2	80.1	72.4	74.8	66.4
Does the program help you to say no to harmful things other kids might want you to do?	82.6	80.5	86.6	88.9	82.0	81.3
Has the program helped you to get along better with other people?	70.3	74.1	76.1	76.7	75.4	62.4
Are other kids nicer to you because of the program?	50.3	56.1	58.4	55.0	55.9	40.5
Was the time spent on the program helpful?	79.1	75.3	85.9	81.4	79.8	78.5

Program Effectiveness by Grade Level. In general, the higher the grade level, the smaller the percentage of students who rated the program positively in all categories. Although only 35.0% of 9th grade students thought other kids were nicer because of the program, $\frac{3}{4}$'s of these same students liked the program.

Table 31. Effectiveness of and Satisfaction with SPIRIT by Grade Level (Yes, a lot & Yes, a little, combined Percentages)				
	2 nd – 3 rd Grade	4 th – 5 th Grade	6 th – 8 th Grade	9 th Grade
Did you like the program?	97.0	88.3	74.7	76.6
Did the program teach you what to do when you are angry?	94.2	85.1	72.1	63.6
Do you act better because of the program?	89.9	74.7	62.9	53.9
Did the program help you feel better about yourself?	91.0	76.2	65.1	58.3
Does the program help you to say no to harmful things other kids might want you to do?	91.3	87.9	79.1	70.7
Has the program helped you to get along better with other people?	91.4	76.2	64.2	53.0
Are other kids nicer to you because of the program?	74.3	52.3	46.5	35.0
Was the time spent on the program helpful?	93.0	84.8	71.0	69.4

Program Effectiveness by Sex. A greater percentage of females liked the program than males, thought the program positively affected their behavior, and thought it improved their self-esteem. Females were also more likely to think that the time spent on the program was helpful.

Table 32. Effectiveness of and Satisfaction with SPIRIT by Sex (Yes, a lot & Yes, a little, combined Percentages)		
	Male	Female
Did you like the program?	80.1	86.7
Did the program teach you what to do when you are angry?	77.0	79.6
Do you act better because of the program?	66.5	72.1
Did the program help you feel better about yourself?	68.9	74.1
Does the program help you to say no to harmful things other kids might want you to do?	80.0	84.9
Has the program helped you to get along better with other people?	69.4	71.2
Are other kids nicer to you because of the program?	49.9	50.7
Was the time spent on the program helpful?	76.5	81.5

Summary

- In general, the higher the grade level, the smaller percentage of students who rated the program positively in all categories. Despite this, $\frac{3}{4}$'s of students in 9th grade reported liking the program.
- The majority of youth liked the program at least a little (83.5%) and most thought the program was effective, especially in helping them with resistance skills and anger management. The area in which the program was thought to be least effective was in getting others to be nicer.
- A greater percentage of females liked the program than males, thought the program positively affected their behavior, and thought it improved their self-esteem. Females were also more likely to think that the time spent on the program was helpful.

Chapter 8 - Protective Factors

Protective factors are those aspects that bolster children against the expression of aggression and use of alcohol, tobacco or other drugs. One of those factors, social competence, was assessed in children in kindergarten through third grade. Research shows that greater levels of social competence in a young child predict less likelihood that they will display problem behaviors and use substances when they are older. Levels of empathy, decision making skills, and the influence of caring adults in the lives of students in grades 4-12 were measured through self-report.

Social Competence in Children (Kdg. – 3rd grade)

Teachers reported that the majority of children displayed appropriate prosocial behavior such as working well in a group and sharing material. They also reported young students regulated their emotions such as thinking before acting and being able to calm down, either well or very well. The prosocial behaviors children were most able to do well were sharing material, cooperating with peers, being helpful toward others, and acting friendly toward others. Teachers reported that, in general, children were better able to behave prosocially than to regulate their emotions appropriately.

Table 33. Observed Expression of Social Competence

	Not at all	A little	Moderately Well	Well	Very Well
Prosocial Behavior					
Expressed needs and feelings appropriately.	2.9	13.4	22.2	34.1	27.4
Resolves peer problems on his/her own.	4.9	16.3	25.1	30..8	22.9
Is very good at understanding other people's feelings.	3.0	13.9	22.0	31.3	29.7
Is aware of the effect of his/her behavior on others.	4.5	15.2	19.4	34.6	26.3
Works well in a group.	3.6	12.9	20.5	29.4	33.6
Shares materials with others.	1.0	5.9	22.0	30.7	40.7
Cooperates with peers without prompting.	1.6	9.6	22.0	31.0	35.8
Is helpful to others.	1.0	7.6	18.4	31.0	42.0
Listens to others' points of view.	1.4	11.0	22.2	33.0	32.3
Can give suggestions and opinions without being bossy.	3.7	11.9	22.3	35.3	26.7
Acts friendly toward others.	1.2	7.5	19.0	32.1	40.2
Emotion Regulation					
Can accept things not going his/her way.	5.3	16.0	21.3	32.8	24.5
Copes well with failure.	5.5	14.3	23.8	33.4	23.0
Accepts legitimate imposed limits.	2.6	12.0	19.7	33.7	32.0
Thinks before acting.	5.0	16.3	21.3	31.4	26.0
Can calm down when excited or all wound up.	3.0	13.7	19.2	33.4	30.7
Can wait in line patiently when necessary.	3.0	11.3	17.6	32.1	35.9
Plays by the rules of the game.	1.7	10.9	21.8	30.1	35.4
Controls temper when there is a disagreement.	4.7	10.3	21.1	30.7	33.0

Social Competence by SPIRIT Site. Note that the SPIRIT program was not implemented in Kdg-3rd grades in Ritenour. Any difference in the table below could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 34. Observed Expression of Social Competence by Site (Well & Very Well, combined Percentages)					
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid
Prosocial Behavior					
Expressed needs and feelings appropriately.	61.5	60.5	49.3	76.6	59.4
Resolves peer problems on his/her own.	53.7	53.4	34.7	66.7	54.2
Is very good at understanding other people's feelings.	61.1	60.0	52.6	75.7	57.9
Is aware of the effect of his/her behavior on others.	60.9	59.8	42.1	50.2	59.2
Works well in a group.	63.0	65.5	50.6	73.9	58.2
Shares materials with others.	71.4	68.5	63.6	84.7	71.5
Cooperates with peers without prompting.	66.8	66.4	56.6	79.3	64.5
Is helpful to others.	73.0	71.6	60.5	87.4	72.0
Listens to others' points of view.	65.3	63.7	55.8	81.1	62.6
Can give suggestions and opinions without being bossy.	62.1	61.0	55.8	73.0	60.1
Acts friendly toward others.	72.3	73.2	53.9	86.4	70.4
Emotion Regulation					
Can accept things not going his/her way.	57.3	58.1	41.6	69.4	55.6
Copes well with failure.	56.4	58.0	32.5	65.8	57.9
Accepts legitimate imposed limits.	65.7	69.3	51.9	80.0	58.3
Thinks before acting.	57.4	58.1	50.0	65.8	54.7
Can calm down when excited or all wound up.	64.1	64.4	52.0	78.4	60.6
Can wait in line patiently when necessary.	68.0	67.6	61.8	80.2	64.5
Plays by the rules of the game.	65.6	66.6	56.6	74.8	62.6
Controls temper when there is a disagreement.	63.8	66.2	54.5	71.2	59.9

Social Competence by Sex. Females were better able to regulate their emotions than males. They were also more likely to behave prosocially.

Table 35. Observed Expression of Social Competence by Sex (Well & Very Well, combined Percentages)		
	Male	Female
Prosocial Behavior		
Expressed needs and feelings appropriately.	52.7	70.6
Resolves peer problems on his/her own.	48.6	59.0
Is very good at understanding other people's feelings.	55.4	66.8
Is aware of the effect of his/her behavior on others.	55.6	66.4
Works well in a group.	56.3	69.7
Shares materials with others.	67.7	75.2
Cooperates with peers without prompting.	60.4	73.3
Is helpful to others.	67.5	78.6
Listens to others' points of view.	60.7	69.9
Can give suggestions and opinions without being bossy.	60.7	63.5
Acts friendly toward others.	68.7	76.1
Emotion Regulation		
Can accept things not going his/her way.	53.0	61.7
Copes well with failure.	51.4	61.4
Accepts legitimate imposed limits.	59.3	72.3
Thinks before acting.	49.7	65.2
Can calm down when excited or all wound up.	55.7	72.5
Can wait in line patiently when necessary.	59.8	76.3
Plays by the rules of the game.	59.5	71.7
Controls temper when there is a disagreement.	57.4	70.2

Empathy

The majority of youth, approximately 79% to 88%, reported that they were sad when someone was left out, upset when they saw an animal hurt, and felt bad when someone else got their feelings hurt. Being upset at seeing an animal hurt was most likely to be reported.

Table 36. Youth Capacity for Empathy				
	Strongly Disagree	Disagree	Agree	Strongly Agree
It makes me sad if I see someone who is left out.	5.5	15.1	50.9	28.5
I get upset when I see an animal being hurt.	3.9	8.3	33.4	54.4
I feel bad when someone else gets their feelings hurt.	4.4	13.0	49.3	33.2

Empathy by SPIRIT Site. Any differences in empathy between districts could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 37. Youth Capacity for Empathy by Site (Agree & Strongly Agree, combined Percentages)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
It makes me sad if I see someone who is left out.	79.4	86.0	77.4	92.7	84.4	72.4
I get upset when I see an animal being hurt.	87.8	92.4	85.4	93.3	85.2	86.0
I feel bad when someone else gets their feelings hurt.	82.5	88.2	81.0	94.4	86.3	76.6

Empathy by Grade Level. Students in the 4th – 5th grades were the most likely to report being empathetic. The percentage of youth who reported getting upset when seeing an animal hurt, however, continued to decrease as grade level increased, however students in 6th – 8th and 9th grades reported feeling similarly when someone is left out or gets their feelings hurt.

Empathy by Sex. A greater percentage of females than males reported feelings of empathy.

Decision Making

Students were more likely to report making good decisions than thinking about their choices, the consequences of their actions, and other people's feelings.

Table 38. Youth Decision Making Skills				
	Never	Sometimes but not Often	Often	All the Time
How often do you stop to think about your choices before you make a decision?	4.4	33.3	49.5	12.8
How often do you stop to think about how your decisions may affect others' feelings?	7.1	30.7	45.0	17.3
How often do you stop to think about all of the things that may happen as a result of your decisions?	6.2	26.9	47.0	19.9
How often do you make good decisions?	1.9	18.3	62.7	17.1

Decision Making by SPIRIT Site. Any differences in youths' decision making skills between districts could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 39. Youth Decision Making Skills by Site (Often & All the Time, combined percentages)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
How often do you stop to think about your choices before you make a decision?	62.3	68.3	63.2	69.8	61.7	58.1
How often do you stop to think about how your decisions may affect others' feelings?	62.3	68.5	69.1	68.7	62.1	56.3
How often do you stop to think about all of the things that may happen as a result of your decisions?	66.9	70.4	72.3	67.0	67.1	63.8
How often do you make good decisions?	79.8	83.1	78.9	84.9	76.6	78.6

Decision Making by Grade Level. Students in the 4th – 5th grades were more likely than older youth to report thinking about their choices and others' feelings before making decisions. Students in the 4th – 5th and 6th – 8th grades were equally likely to report they made good decisions, with a smaller percentage of youth in the 9th grade indicating that they did so often or all of the time.

Decision Making by Sex. Males and females were equally as likely to report good decision making skills and the propensity to make good decisions often or all of the time.

Caring Adults

Approximately 84% to 90% of students reported there were caring adults at both their school and home. A slightly greater percentage of youth reported the presence of caring adults at home than at school.

Table 40. Presence of Caring Adults				
	Strongly Disagree	Disagree	Agree	Strongly Agree
At school, there is a teacher or another adult whom I can go to if something is really bothering me.	6.1	10.2	42.0	41.6
At school, there is a teacher or another adult who listens to me when I have something to say.	4.8	10.0	46.0	39.1
At home, there is a parent or another adult whom I can go to if something is really bothering me.	3.7	7.1	27.6	62.0
At home, there is a parent or another adult who listens to me when I have something to say.	3.8	7.2	31.7	57.2

Caring Adults by SPIRIT Site. Any differences between districts in the percentage of youth who reported the presence of caring adults in their lives could be due to multiple factors, including, but not limited to, the location of each district, the demographic profile and average age of the respondents, and the programs being implemented within each district.

Table 41. Presence of Caring Adults by Site (Agree & Strongly Agree, combined percentages)						
	SPIRIT Total	Carthage	Hickman Mills	Knox	New Madrid	Ritenour
At school, there is a teacher or another adult whom I can go to if something is really bothering me.	83.6	85.8	81.4	90.5	87.3	80.6
At school, there is a teacher or another adult who listens to me when I have something to say.	85.1	88.7	80.2	84.4	88.5	81.8
At home, there is a parent or another adult whom I can go to if something is really bothering me.	89.6	93.9	78.0	96.1	93.8	87.6
At home, there is a parent or another adult who listens to me when I have something to say.	88.9	92.9	78.8	96.0	91.7	87.3

Caring Adults by Grade Level. In general, students in the 4th – 5th grades were most likely to think there was someone at home or at school they could go to if something was bothering them or who would listen if they had something to say. The percentage of students who reported the presence of caring adults at school steadily decreased with grade level. The percentage of students who reported the presence of caring adults at home was similar among 6th – 8th and 9th grade youth.

Caring Adults by Sex. Females were more likely than males to report the presence of caring adults.

Summary

- *Empathy.* The majority of students, from about 79% to 88%, reported they were sad when someone was left out, were upset when they saw an animal hurt, and felt bad when someone else got their feelings hurt. Being upset at seeing an animal hurt was most frequently reported.
- *Decision making.* Students were more likely to report making good decisions than thinking about their choices, the consequences of their actions, and other people's feelings. Younger students were more likely than older youth to report thinking about their choices and others' feelings before making decisions.
- *Caring adults.* The vast majority of students reported there were caring adults at both their school and home. In general, more students in rural district than urban areas thought there were caring adults at school.

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